

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 4, 2004, 15:51:18 ; Search time 64 Seconds  
(without alignments)  
5280.705 Million cell updates/sec

Title: US-10-021-323-13  
Perfect score: 609  
Sequence: 1 ggaatgaaatcaactttt.....tgaagctntacaattaagg 609

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA:\*

- 1: /cgn2\_6/ptodata/2/ina/5A COMB.seq.\*
- 2: /cgn2\_6/ptodata/2/ina/5B COMB.seq.\*
- 3: /cgn2\_6/ptodata/2/ina/6A COMB.seq.\*
- 4: /cgn2\_6/ptodata/2/ina/6B COMB.seq.\*
- 5: /cgn2\_6/ptodata/2/ina/PTUS COMB.seq.\*
- 6: /cgn2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	51.6	8.5	7218	1	US-08-232-463-14
2	40	6.6	1052	1	US-08-466-603-1
3	40	6.6	1052	1	US-08-314-503A-1
4	40	6.6	1052	1	US-08-468-066-1
5	40	6.6	1052	2	US-08-466-717-1
6	40	6.6	1052	3	US-08-466-743-1
7	40	6.6	1052	5	PCT-US95-12414-1
8	39.8	6.5	289	3	US-09-007-005-17
9	39.8	6.5	289	3	US-09-244-796-17
10	39.6	6.5	3955	4	US-09-976-594-207
11	37.8	6.2	966	2	US-08-766-738-2
12	37.8	6.2	966	4	US-09-262-610-2
13	36.2	5.9	1965	3	US-09-178-252-26
14	36.2	5.9	1965	4	US-09-826-660-26
15	35.6	5.8	3211	2	US-08-574-959A-8
16	35.6	5.8	3211	3	US-09-357-014-8
17	35.6	5.8	3901	2	US-08-574-959A-6
18	35.6	5.8	3901	3	US-09-357-014-6
19	35.4	5.8	429	4	US-09-489-039A-349
20	35.4	5.8	3489	2	US-08-728-323A-1
21	35.4	5.8	3489	4	US-09-298-568-1
22	35.4	5.8	3489	4	US-09-410-399-1
23	35.4	5.8	32207	2	US-08-770-379-20
24	35.4	5.8	32207	3	US-08-757-669A-20
25	35.4	5.8	32207	4	US-09-230-371A-20
26	34.4	5.6	856	4	US-09-134-000C-3304
27	34.4	5.6	856	4	US-09-171-517B-15

Sequence 8, Appli  
Sequence 1, Appli  
Sequence 4, Appli  
Sequence 10, Appli  
Sequence 10, Appli  
Sequence 2, Appli  
Sequence 9, Appli  
Sequence 2, Appli  
Sequence 10, Appli  
Sequence 2, Appli  
Sequence 2, Appli  
Sequence 6, Appli  
Sequence 6, Appli  
Sequence 6, Appli  
Sequence 6, Appli  
Sequence 7, Appli

## ALIGNMENTS

RESULT 1  
US-08-232-463-14  
Sequence 14, Application US/08232463  
Patent No. 5670367  
GENERAL INFORMATION:  
APPLICANT: DORNER, F.  
APPLICANT: SCHEIFLINGER, F.  
APPLICANT: FALKNER, P. G.  
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS  
NUMBER OF SEQUENCES: 52  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Foley & Lardner  
STREET: 1800 Diagonal Road, Suite 500  
CITY: Alexandria  
STATE: VA  
COUNTRY: USA  
ZIP: 22313-0299  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/232,463  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/07/935,313  
FILING DATE:  
APPLICATION NUMBER: EP 91 114 300.6  
FILING DATE: 26-AUG-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: BENT, Stephen A.  
REGISTRATION NUMBER: 29,768  
REFERENCE/DOCKET NUMBER: 30472/114 IMMU  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (703)836-9300  
TELEFAX: (703)833-4109  
TELEX: 899149  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 7218 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
CLONE: pTZgpt-Fls  
US-08-232-463-14

Query Match 8.5%; Score 51.6; DB 1; Length: 7218;

Martine  
10/02/323 Page 1  
Seq. ID 13 issued  
Pub dB

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Best Local Similarity 3.8%; Pred. No. 8.2e-06;
Matches 15; Conservative 221; Mismatches 160; Indels 0; Gaps 0;
QY 140 GCTCTCTGCTGCTTTTCCACTATTTTCCACTCCTCACATACCCAGCTCTCCAGCAGTATTC 199
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Db 1058 GCTGCGATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1117
QY 200 AAGCTCTCATGCTCCGACCCGACCCATCCCATTCAGTCAACACTTTAAAGCTTCGTC 259
    : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1118 YTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1177
QY 260 AAGTCACTGCTCTCTCTTTCACGCGCGCGTGAATGACCAATTCCTCTCTCTCTCTC 319
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Db 1178 YTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1237
QY 320 GTCACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 379
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Db 1238 YTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1297
QY 380 GTTCAACATGCTTTTCCACTAAGGCTCCATTCCTCAAGCTGAATGGACAGACC 439
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QY 440 GATTTCTGAGCAACCAATTCAGTCTCTCAGACTAAGCAATCTCCATCTCTGTC 499
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Db 1358 YTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1417
QY 500 GAGCTTCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 535
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Db 1418 YTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1453

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RESULT 2

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US-08-466-603-1/c
; Sequence 1, Application US/08466603
; Patent No. 5726018
; GENERAL INFORMATION:
; APPLICANT: Pasternack, Gary R.
; APPLICANT: Kuhajda, Francis P.
; TITLE OF INVENTION: No. 5726018el Mammalian Protein Associated With
; TITLE OF INVENTION: Uncontrolled Cell Division
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Banner, Birch, McKie & Beckett
; STREET: 1001 G Street, N.W.
; CITY: Washington, D.C.
; STATE: District of Columbia
; COUNTRY: U.S.A.
; ZIP: 20001
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/466,603
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/314,503
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Posorske Esq., Laurence H.
; REGISTRATION NUMBER: 34,698
; REFERENCE/DOCKET NUMBER: 1107.47218
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202 508-9153
; TELEFAX: 202 508-9299
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1052 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double

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; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 97..843
; US-08-466-603-1

Query Match 6.6%; Score 40; DB 1; Length 1052;
Best Local Similarity 45.7%; Pred. No. 0.013;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;
QY 59 AGAAGCGGATGTAACATCATGTTTGAATTTCTGAAATCAACCAATCGGCTGATTT 118
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Db 879 ACAATAGGAATTTTCAAAATAGGTTATTCACATAGTATCTTCCCTCATCTTC 820
QY 119 GGTGTCGTAATACCAATCATGCTCTGCACTCTTTTCCACTATTTTCACTCACATACC 178
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Db 819 AGTTCTCGTTTGGCTTCTGACCCCTTTCTTCTCAGCAGCTCTTCTTCTTCTCTC 760
QY 179 CAGTCTTCCAGCAGTATTCAGCTCCTCACAATCCCAACCCATCCCAATTCAGATC 238
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Db 759 GTCACTTACCTTCCATCGTTATAAACCCTTCTTCATCCTCTCTCTCTCTCTCTCAGTC 700
QY 239 AAACACTTTAAAGCCTTCGCAAGTCACTGCTCTTCTTCTTCCAGCGCGGCTGATGAC 298
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Db 699 CTCCTCTTCACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC 640
QY 299 CAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
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Db 639 TTCATCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608

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RESULT 3

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US-08-314-503A-1/c
; Sequence 1, Application US/08314503A
; Patent No. 5734022
; GENERAL INFORMATION:
; APPLICANT: Pasternack, Gary R.
; APPLICANT: Kuhajda, Francis P.
; TITLE OF INVENTION: No. 5734022el Mammalian Protein Associated With
; TITLE OF INVENTION: Uncontrolled Cell Division
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Banner, Birch, McKie & Beckett
; STREET: 1001 G Street, N.W.
; CITY: Washington, D.C.
; STATE: District of Columbia
; COUNTRY: U.S.A.
; ZIP: 20001
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/314,503A
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Posorske Esq., Laurence H.
; REGISTRATION NUMBER: 34,698
; REFERENCE/DOCKET NUMBER: 1107.47218
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202 508-9153
; TELEFAX: 202 508-9299
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1052 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear

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/ LENGTH: 1052 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: cdna
/ ORIGINAL SOURCE:
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: 97..843
US-08-466-717-1

Query Match
Best Local Similarity 6.6%; Score 40; DB 2; Length 1052;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY 59 AGAAGCGGAATGTAACATCATGTTTGAATTTCTTGAAATCAACCATCGCGTCTGAATT 118
Db 879 ACAATAGGAATTTTCAAAATAGGTTATTCCACTTAGTCATCATCTTCTCCCTCATCTTC 820
QY 119 GGTGTGTAATACCAATCATGCTCTGCAGTCTTTTCCACTATTTTCACTACATAC 178
Db 819 AGGTTCTGTTTTCGTTCTGACCCCTTTCTTCTTCCACCAAGCTCTTCTCATCTTCTTC 760
QY 179 CAGTCTTCCAGCAGTATTCAAGCTCTTCAATCCCCCAACCCATCCCATTCAGTC 238
Db 759 GTCACTACCTCTCCATCGTTATACCTTCTTTCATCTCTCTCTCTCTCTCTCTCTCT 700
QY 239 AAACACTTTAAAGCTTTCGCAAGTCACTGTCCTTCTTCTTCCAGCGCCGCGTAATGAC 298
Db 699 CTCCTCTTCAACCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 640
QY 299 CAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
Db 639 TTCATCACTACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608

RESULT 6
US-08-466-743-1/c
Sequence 1, Application US/08466743
Patent No. 6040173
GENERAL INFORMATION:
APPLICANT: Pasternack, Gary R.
APPLICANT: Kuhajda, Francis P.
TITLE OF INVENTION: No. 6040173el Mammalian Protein Associated With
TITLE OF INVENTION: Novel Mammalian Protein Associated With
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Banner, McKie & Beckett
STREET: 1001 G Street, N.W.
CITY: Washington, D.C.
STATE: District of Columbia
COUNTRY: U.S.A.
ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,743
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/314,503
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Posorske Esq., Laurence H.
REGISTRATION NUMBER: 34,698
REFERENCE/DOCKET NUMBER: 1107.47218
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202 508-9299
TELEFAX: 202 508-9153
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/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 1052 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: cdna
/ ORIGINAL SOURCE:
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: 97..843
US-08-466-743-1

Query Match
Best Local Similarity 6.6%; Score 40; DB 3; Length 1052;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY 59 AGAAGCGGAATGTAACATCATGTTTGAATTTCTTGAAATCAACCATCGCGTCTGAATT 118
Db 879 ACAATAGGAATTTTCAAAATAGGTTATTCCACTTAGTCATCATCTTCTCCCTCATCTTC 820
QY 119 GGTGTGTAATACCAATCATGCTCTGCAGTCTTTTCCACTATTTTCACTACATAC 178
Db 819 AGGTTCTGTTTTCGTTCTGACCCCTTTCTTCTTCCACCAAGCTCTTCTCATCTTCTTC 760
QY 179 CAGTCTTCCAGCAGTATTCAAGCTCTTCAATCCCCCAACCCATCCCATTCAGTC 238
Db 759 GTCACTACCTCTCCATCGTTATACCTTCTTTCATCTCTCTCTCTCTCTCTCTCTCT 700
QY 239 AAACACTTTAAAGCTTTCGCAAGTCACTGTCCTTCTTCTTCCAGCGCCGCGTAATGAC 298
Db 699 CTCCTCTTCAACCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 640
QY 299 CAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
Db 639 TTCATCACTACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608

RESULT 7
PCT-US95-12414-1/c
Sequence 1, Application PC/TUS9512414
GENERAL INFORMATION:
APPLICANT: Pasternack, Gary R.
APPLICANT: Kuhajda, Francis P.
TITLE OF INVENTION: Novel Mammalian Protein Associated With
TITLE OF INVENTION: Uncontrolled Cell Division
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Banner & Allegratti, Ltd.
STREET: 1001 G Street, N.W.
CITY: Washington, D.C.
STATE: District of Columbia
COUNTRY: U.S.A.
ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/12414
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/314,503
FILING DATE: 22-SEP-1994
ATTORNEY/AGENT INFORMATION:
NAME: Hoscheit Esq., Dale H.
REGISTRATION NUMBER: 19,090
REFERENCE/DOCKET NUMBER: 1107.51507
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202 508-9153
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/ TELEFAX: 202 508-9299
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 1052 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: cDNA
/ ORIGINAL SOURCE:
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: 97..843
PCT-US95-12414-1

Query Match 6.6%; Score 40; DB 5; Length 1052;
Best Local Similarity 46.7%; Pred. No. 0.013;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY 59 AGAAGCGGAATGAACATCATGTTTGAATCTCTGAATTCACCAATGCGCGTCTGAAT 118
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 879 ACAATAGGATTTTCAAAATAGTTATCCACTTAGTCATCTTCTCCCTCATCTTC 820
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 119 GGTGTGTAATACAAATATGCTCTCGAGTCTTTTCCAGTATTTTCACTATTTCACTACATACC 178
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 819 AGGTTCTCGTTTTCGCTCTCGACCCCTTCTCTTCCACCAAGCTCTTCTTCACTCTTCTC 760
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QY 179 CAGTCTTCCAGCAGCATGATTCAGCTCCTCATCTCCCGCCCAACCCATCCCATTCAGTCC 238
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 759 GTCACTTACTCTCCATCGTTATACCTTCTTATCTCTCTCTCTCTCTCTCTCTCTCTCTCT 700
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 239 AAACACTTAAAGCCCTTCGAAAGTCAGTCTCTTCTTCAAGCGCGCGCGTGAATGAC 298
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 699 CTCCTCTTACCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 640
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 299 CAATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 639 TTCAATCATATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608
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RESULT 8
US-09-007-005-17/c
; Sequence 17, Application US/09007005B
; Patent No. 6258558
; GENERAL INFORMATION:
; APPLICANT: Szostak, Jack W.
; APPLICANT: Roberts, Richard W.
; APPLICANT: Liu, Rih
; TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN
; FILE REFERENCE: 00786/350003
; CURRENT APPLICATION NUMBER: US/09/007,005B
; EARLIER FILING DATE: 1998-01-14
; EARLIER APPLICATION NUMBER: 60/035,963
; EARLIER FILING DATE: 1997-01-27
; EARLIER APPLICATION NUMBER: 60/064,491
; EARLIER FILING DATE: 1997-11-06
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 289
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Translation template
; NAME/KEY: misc_feature
; LOCATION: (1)...(289)
; OTHER INFORMATION: n = A,T,C or G
US-09-007-005-17

Query Match 6.5%; Score 39.8; DB 3; Length 289;
Best Local Similarity 8.2%; Pred. No. 0.0072;
Matches 20; Conservative 102; Mismatches 123; Indels 0; Gaps 0;

QY 157 CACTATTTTCACTCACCACATACCCAGTCTTCCAGCAGCTATTCAGCTCCTCATCCCC 216
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QY 245 YAGTGTATYAYCYGAYGCTTGYGYSYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 186
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 217 CCAACCCATCCCATTCAGTCAACACACTTTTAAAGCCCTTCGCAAGGTCAGTGTCTTCT 276
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 185 YNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 126
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QY 277 CTTCCAGCGCGCGTGAATGACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 336
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 125 YNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 66
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 337 GTGGTTTCGAGATGATTCATAAAGAACACAGATTCATCCAGTTCACCAATGTTTTC 396
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 65 YNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 6
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 397 CCACT 401
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 5 YCYCY 1
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

RESULT 9
US-09-244-796-17/c
; Sequence 17, Application US/09244796
; Patent No. 6281344
; GENERAL INFORMATION:
; APPLICANT: Szostak, Jack W.
; APPLICANT: Roberts, Richard W.
; APPLICANT: Liu, Rih
; TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN
; FILE REFERENCE: 00786/350007
; CURRENT APPLICATION NUMBER: US/09/244,796
; CURRENT FILING DATE: 1999-02-05
; EARLIER FILING DATE: 1999-03-27
; EARLIER FILING DATE: 1997-01-27
; EARLIER APPLICATION NUMBER: 60/064,491
; EARLIER FILING DATE: 1997-11-06
; EARLIER APPLICATION NUMBER: 09/007,005
; EARLIER FILING DATE: 1998-01-14
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 289
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Translation template
; NAME/KEY: misc_feature
; LOCATION: (1)...(289)
; OTHER INFORMATION: n = A,T,C or G
US-09-244-796-17

Query Match 6.5%; Score 39.8; DB 3; Length 289;
Best Local Similarity 8.2%; Pred. No. 0.0072;
Matches 20; Conservative 102; Mismatches 123; Indels 0; Gaps 0;

QY 157 CACTATTTTCACTCACCACATACCCAGTCTTCCAGCAGCTATTCAGCTCCTCATCCCC 216
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 245 YAGTGTATYAYCYGAYGCTTGYGYSYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 186
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 217 CCAACCCATCCCATTCAGTCAACACACTTTTAAAGCCCTTCGCAAGGTCAGTGTCTTCT 276
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 185 YNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 126
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 277 CTTCCAGCGCGCGTGAATGACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 336
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 125 YNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNYNY 66
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 337 GTGGTTTCGAGATGATTCATAAAGAACACAGATTCATCCAGTTCACCAATGTTTTC 396
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
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Db 65 YNYSNNYCYATYTYGYTAYATYTYGYTAYAYATYAYGYTAYAYTYGYTTC 6  
QY 397 CCACT 401  
Db 5 YCYCY 1

RESULT 10  
US-09-976-594-207/c  
; Sequence 207, Application US/09976594  
; Patent No. 6673549  
; GENERAL INFORMATION:  
; APPLICANT: Furness, Michael  
; APPLICANT: Buchbinder, Jenny  
; TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS  
; FILE REFERENCE: PA-0041 US  
; CURRENT APPLICATION NUMBER: US/09/976,594  
; CURRENT FILING DATE: 2001-10-12  
; PRIOR APPLICATION NUMBER: 60/240,409  
; PRIOR FILING DATE: 2000-10-12  
; NUMBER OF SEQ ID NOS: 1143  
; SOFTWARE: PERL Program  
; SEQ ID NO 207  
; LENGTH: 3955  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc feature  
; OTHER INFORMATION: Incyte ID No. 6673549 1041138.7  
; NAME/KEY: unsure  
; LOCATION: 2235..2268  
; OTHER INFORMATION: a, t, c, g, or other  
US-09-976-594-207

Query Match 6.5%; Score 39.6; DB 4; Length 3955;  
Best Local Similarity 46.3%; Pred. No. 0.036;  
Matches 126; Conservative 0; Mismatches 146; Indels 0; Gaps 0;  
QY 59 AGAAGCGGAATGATACATCATGTTTTTGAATTTCTTGAATAATCAACATGCGTCTGAATT 118  
Db 2433 ACAATAGGAATTTTCAAAATAGGTTATTCACATCTAGTCAATCATCTTCTCCCTCATCTC 2374  
QY 119 GGTGCGTAATACCAATCATGCTCTCGAGTCTTTCACATATTTTCACTATTTGACCTCACATCC 178  
Db 2373 AGTTCTCGTTCGTTCTGACCCCTTCTTCTTTCACACAGCTCTTCTGATCTTCTTC 2314  
QY 179 CAGTCTCCGACGATTTTCAAGCTCTTCAATCCATCCATCCATCCATCCATCCATCCATCCATCC 238  
Db 2313 GTCATCTACCTCTCCATCGTTATTAACCTTCTTTCATCTCTCTCTCTCTCTCTCTCTCTCTCT 2254  
QY 239 AAACACTTTAAAGCTTCGCAAGTCACTGTTCTTCTTCCATCCGCGCGCGCGTGAATGAC 298  
Db 2253 CTCCTCTTCACT 2194  
QY 299 CAATTCCT 330  
Db 2193 TTCATCATCT 2162

RESULT 11  
US-08-766-738-2/c  
; Sequence 2, Application US/08766738  
; Patent No. 5916749  
; GENERAL INFORMATION:  
; APPLICANT: Bandman, Olga  
; APPLICANT: Goli, Surya K.  
; TITLE OF INVENTION: NOVEL HUMAN PHOSPHATASE INHIBITOR PROTEIN  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
; STREET: 3174 Porter Drive  
; CITY: Palo Alto

STATE: CA  
COUNTRY: USA  
ZIP: 94304  
COMPUTER READABLE FORM:  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/766,738  
FILING DATE: Herewith  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Billings, Lucy J.  
REGISTRATION NUMBER: 36,749  
REFERENCE/DOCKET NUMBER: PF-0177 US  
TELEPHONE: 415-855-0555  
TELEFAX: 415-845-4166  
TELEX:  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 966 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
LIBRARY: Consensus  
CLONE: 1813361  
US-08-766-738-2

Query Match 6.2%; Score 37.8; DB 2; Length 966;  
Best Local Similarity 50.8%; Pred. No. 0.061;  
Matches 90; Conservative 0; Mismatches 87; Indels 0; Gaps 0;  
QY 150 TCTTTTCCACTATTTTCACTCCATCCATCCATCCATCCATCCATCCATCCATCCATCCATCCATCC 209  
Db 836 TCTCTCTCATCATCTGTTCT 777  
QY 210 CATCCCCCAACCCATCCATCCATCCATCCATCCATCCATCCATCCATCCATCCATCCATCCATCC 269  
Db 776 TCATCTCTATCTCATCTTCT 717  
QY 270 TCTTCTCTTCACTCCGCGCGCGGTAATGACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCT 326  
Db 716 ACTTCATCTGCT 660

RESULT 12  
US-09-262-610-2/c  
; Sequence 2, Application US/09262610  
; Patent No. 6428949  
; GENERAL INFORMATION:  
; APPLICANT: Bandman, Olga  
; APPLICANT: Goli, Surya K.  
; TITLE OF INVENTION: NOVEL HUMAN PHOSPHATASE INHIBITOR PROTEIN  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
; STREET: 3174 Porter Drive  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94304  
COMPUTER READABLE FORM:  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/262,610  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/766,738  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Billings, Lucy J.  
REGISTRATION NUMBER: 36,749  
REFERENCE/DOCKET NUMBER: PF-0177 US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-855-0555  
TELEFAX: 415-845-4166  
TELEX:  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 966 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
LIBRARY: Consensus  
CLONE: 1813361  
US-09-262-610-2

Query Match 6.2%; Score 37.8; DB 4; Length 966;  
Best Local Similarity 50.8%; Pred. No. 0.061;  
Matches 90; Conservative 0; Mismatches 87; Indels 0; Gaps 0;

Qy 150 TCTTTTCCACTATTTTCCACTTCATACCCAGTCTTCCCGACGATTTCAAGCTCTCA 209  
Db 836 TCTCTTCATCATCTGTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 777  
Qy 210 CATCCCCCAACCCATTCAGTCAACACATTTAAAGCTTCGCAAGTCTACTG 269  
Db 776 TCATCTCATCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 717  
Qy 270 TCTTCTCTTTCACGCGCGCGTGAATCACAATTCCTCTCTCTCTCTCTCTCTCA 326  
Db 716 ACTTCATCTGCTCA 660

RESULT 13  
US-09-178-252-26  
Sequence 26, Application US/09178252  
Patent No. 6218188  
GENERAL INFORMATION:  
APPLICANT: Cardineau, Guy A.  
APPLICANT: Stelman, Steven J.  
APPLICANT: Narva, Kenneth E.  
TITLE OF INVENTION: Plant-Optimized Genes Encoding Pesticidal Toxins  
FILE REFERENCE: MA-714XC2  
CURRENT APPLICATION NUMBER: US/09/178,252  
CURRENT FILING DATE: 1998-10-23  
EARLIER APPLICATION NUMBER: 60/065,215  
EARLIER FILING DATE: 1997-11-12  
EARLIER APPLICATION NUMBER: 60/076,445  
EARLIER FILING DATE: 1998-03-02  
NUMBER OF SEQ ID NOS: 27  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 26  
LENGTH: 1965  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic B.t. toxin gene  
US-09-178-252-26

Query Match 5.9%; Score 36.2; DB 3; Length 1965;  
Best Local Similarity 52.3%; Pred. No. 0.29;  
Matches 80; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

Qy 176 ACCGAGTCTTCCCGACGATTCATCAAGTCTCTCATATCCCGCAACCCATCCCAATTC 235

Db 1336 ACCAAGCGCGCCACACCTTCGCGCAGGACCTCACACCCAGGAGCTCCCGTGGAG 1395  
Qy 236 GTCAACACACTTTAAAGCCTTCGCAAGTCACTGTCTTCTTTCACCGCGCGGTGAAT 295  
Db 1396 AACAAACACTTCAACCTCTCTCCGACGTGACCTTCTCTCGCTTCAACACCCAGGGC 1455  
Qy 296 GACCAATTCCTCA 328  
Db 1456 GGCCCACTCGGACGCTGGGGTTCTCTCCGACC 1488

## RESULT 14

US-09-826-660-26  
Sequence 26, Application US/09826660  
Patent No. 6673990  
GENERAL INFORMATION:  
APPLICANT: Cardineau, Guy A.  
APPLICANT: Stelman, Steven J.  
APPLICANT: Narva, Kenneth E.  
TITLE OF INVENTION: Plant-Optimized Genes Encoding Pesticidal Toxins  
FILE REFERENCE: MA-714XC2D1  
CURRENT APPLICATION NUMBER: US/09/826,660  
CURRENT FILING DATE: 2001-04-05  
PRIOR APPLICATION NUMBER: 09/178,252  
PRIOR FILING DATE: 1998-10-23  
PRIOR APPLICATION NUMBER: 60/065,215  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/076,445  
PRIOR FILING DATE: 1998-03-02  
NUMBER OF SEQ ID NOS: 27  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 26  
LENGTH: 1965  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic B.t. toxin gene  
US-09-826-660-26

Query Match 5.9%; Score 36.2; DB 4; Length 1965;  
Best Local Similarity 52.3%; Pred. No. 0.29;  
Matches 80; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

Qy 176 ACCGAGTCTTCCCGACGATTCATCAAGTCTCTCATATCCCGCAACCCATCCCAATTC 235  
Db 1336 ACCAAGCGCGCCACACCTTCGCGCAGGACCTCACACCCAGGAGCTCCCGTGGAG 1395  
Qy 236 GTCAACACACTTTAAAGCCTTCGCAAGTCACTGTCTTCTTTCACCGCGCGGTGAAT 295  
Db 1396 AACAAACACTTCAACCTCTCTCCGACGTGACCTTCTCTCGCTTCAACACCCAGGGC 1455  
Qy 296 GACCAATTCCTCA 328  
Db 1456 GGCCCACTCGGACGCTGGGGTTCTCTCCGACC 1488

## RESULT 15

US-08-574-959A-8/c  
Sequence 8, Application US/08574959A  
Patent No. 5962224  
GENERAL INFORMATION:  
APPLICANT: Jaekyoon Shin, Insil Jeung, Ratna K. Vadlamudi  
APPLICANT: and Jack L. Strominger  
TITLE OF INVENTION: P62 POLYPEPTIDES, RELATED POLYPEPTIDES  
TITLE OF INVENTION: AND USES THEREFOR  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: LAHIVE & COCKFIELD  
STREET: 60 State Street, Suite 510  
CITY: Boston  
STATE: Massachusetts  
COUNTRY: USA





GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 4, 2004, 15:51:58 ; Search time 246 Seconds  
(without alignments)  
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Title: US-10-021-323-13

Perfect score: 609

Sequence: 1 ggtaagaaatcaaacctttt.....tgaagctntacaaataagg 609

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3222919 seqs, 2451570024 residues

Total number of hits satisfying chosen parameters: 6445838

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Published Applications NA:\*

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- 2: /cgn2\_6/ptodata/1/pubpna/PCT\_NEW\_PUB.seq:\*
- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq:\*
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- 5: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*
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- 10: /cgn2\_6/ptodata/1/pubpna/US09B\_PUBCOMB.seq:\*
- 11: /cgn2\_6/ptodata/1/pubpna/US09C\_PUBCOMB.seq:\*
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- 13: /cgn2\_6/ptodata/1/pubpna/US10A\_PUBCOMB.seq:\*
- 14: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq:\*
- 15: /cgn2\_6/ptodata/1/pubpna/US10C\_PUBCOMB.seq:\*
- 16: /cgn2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq:\*
- 17: /cgn2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq:\*
- 18: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUB.seq:\*
- 19: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	608	99.8	609	17	US-10-021-323-13
2	463.2	76.1	610	17	US-10-021-323-225
3	188.2	30.9	876	13	US-10-424-599-6121
4	146.6	24.1	856	13	US-10-424-599-41291
5	81.2	13.3	381	9	US-09-770-791-166
6	75.8	12.4	591	17	US-10-437-963-79711
7	73	12.0	1037	13	US-10-425-114-23005
8	68	11.2	266	13	US-10-424-599-4057
9	65	10.7	1033	13	US-10-424-599-5364
10	63.2	10.4	441	17	US-10-437-963-77254
11	61.6	10.1	1058	13	US-10-424-599-113581
12	60.2	9.9	519	17	US-10-437-963-20735
13	60.2	9.9	840	17	US-10-437-963-66273
14	59.8	9.8	1924	13	US-10-424-599-23473

c 15	58.4	9.6	786	13	US-10-424-599-79630	A
c 16	57	9.4	1041	17	US-10-437-963-41726	A
c 17	55.6	9.1	576	9	US-09-938-842A-2017	Ap
c 18	55.6	9.1	576	11	US-09-938-842A-2017	Ap
c 19	55.6	9.1	1301	13	US-10-424-599-85423	A
c 20	55.2	9.1	844	13	US-10-425-114-24067	A
c 21	54.8	9.0	750	13	US-10-425-114-14264	A
c 22	54.8	9.0	1089	13	US-10-425-114-14019	A
c 23	54.8	9.0	1185	13	US-10-424-599-88084	A
c 24	54.6	9.0	1110	13	US-10-424-599-124108	A
c 25	53.6	8.8	510	9	US-09-938-842A-1697	Ap
c 26	53.6	8.8	510	11	US-09-938-842A-1697	Ap
c 27	53.6	8.8	653	13	US-10-425-114-23406	A
c 28	53.6	8.8	1014	13	US-10-424-599-23472	A
c 29	50.2	8.2	590	13	US-10-424-599-120268	A
c 30	50.2	8.2	1102	13	US-10-424-599-120279	A
c 31	49.4	8.1	554	13	US-10-424-599-85422	A
c 32	48.8	8.0	810	13	US-10-424-599-104543	A
c 33	47.4	7.8	549	13	US-10-424-599-120235	A
c 34	47.2	7.8	909	13	US-10-424-599-61915	A
c 35	47	7.7	969	13	US-10-425-114-26018	A
c 36	46.6	7.7	1038	13	US-10-425-114-4422	Ap
c 37	46.6	7.7	1089	13	US-10-425-114-17496	A
c 38	46	7.6	1654	13	US-10-425-114-25089	A
c 39	44.6	7.3	1009	17	US-10-437-963-65090	A
c 40	44.4	7.3	915	13	US-10-425-114-24210	A
c 41	43.8	7.2	644	16	US-10-341-961A-130	App
c 42	43.4	7.1	1054	13	US-10-425-114-30226	A
c 43	43.4	7.1	1089	17	US-10-437-963-99628	A
c 44	43	7.1	846	17	US-10-437-963-61	Appl
c 45	43	7.1	905	15	US-10-273-334-7	Appl

#### ALIGNMENTS

##### RESULT 1

US-10-021-323-13  
; Sequence 13, Application US/10021323  
; Publication No. US20040123340A1  
; GENERAL INFORMATION:  
; APPLICANT: Deikman, Jill  
; APPLICANT: Feng, Paul C.C.  
; APPLICANT: Fincher, Karen L.  
; APPLICANT: Ziegler, Todd E.  
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
; TITLE OF INVENTION: Plants  
; FILE REFERENCE: 38-21(52274)B  
; CURRENT APPLICATION NUMBER: US/10/021,323  
; CURRENT FILING DATE: 2001-12-12  
; PRIOR APPLICATION NUMBER: US 60/255, 619  
; PRIOR FILING DATE: 2000-12-14  
; NUMBER OF SEQ ID NOS: 17880  
; SEQ ID NO 13  
; LENGTH: 609  
; TYPE: DNA  
; ORGANISM: Goseypium hirsutum  
; FEATURE:  
; NAME/KEY: unsure  
; LOCATION: (1)..(609)  
; OTHER INFORMATION: unsure at all n locations  
; OTHER INFORMATION: Clone ID: LIB3825-002-Q1-N6-B5  
US-10-021-323-13

Query Match 99.8% Score 608; DB 17; Length 609;

Best Local Similarity 100.0%; Pred. No. 7.5e-183; Indels 0; Gaps 0;  
Matches 609; Conservative 0; Mismatches 0;

Qy 1 GGTAATGAATCAAACTTTTATTTTATTCAGACATGGGATGTTGAGATTAATCAAG 60

Db 1 GGTAATGAATCAAACTTTTATTTTATTCAGACATGGGATGTTGAGATTAATCAAG 60

Qy 61 AACGGGATGTACATCATGTTTGTGAATCTTCTGAAATCAACCATCCCGTCTGANTGG 120

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Db 61 AACGGGAATGAACATCATGTTTGTGAAATCTTGAATTCACCAATCGCGCTGAATTGG 120
Qy 121 TGTGTAATACCAATCATGCTCTGAGTCTTTTCCACTATTTTCACTCATACACCA 180
Db 121 TGTGTAATACCAATCATGCTCTGAGTCTTTTCCACTATTTTCACTCATACACCA 180
Qy 181 GTCTTCCAGCAGTAATCAAGCTCTCACTCCCAACCCCAACCCATCCCAATCAAGTCAA 240
Db 181 GTCTTCCAGCAGTAATCAAGCTCTCACTCCCAACCCCAACCCATCCCAATCAAGTCAA 240
Qy 241 ACACCTTAAAGCCCTTCCAGGTCCTGCTCTTCTTCTTCCAGCGCGCGGTGAATGACCA 300
Db 241 ACACCTTAAAGCCCTTCCAGGTCCTGCTCTTCTTCTTCCAGCGCGCGGTGAATGACCA 300
Qy 301 ATTCTCTCTCTCTCTCTGTCACCAACCATGTCAGTGGGTTCCAGATGGAATTCATAAA 360
Db 301 ATTCTCTCTCTCTCTCTGTCACCAACCATGTCAGTGGGTTCCAGATGGAATTCATAAA 360
Qy 361 AGACACGAATTCATCCAAAGTTCAAAATGTTTCCCACTAAAGGCTCCAAATCTTCAA 420
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Qy 421 GCTGTAATTCAGACACCGGATCTCTCGAGCAACCAATTCAGCTCCCTCCAGCTAAAG 480
Db 421 GCTGTAATTCAGACACCGGATCTCTCGAGCAACCAATTCAGCTCCCTCCAGCTAAAG 480
Qy 481 AGCCATCTCCATCTCTGTCGAGCTTCTCGAATAACGCTTTCGAACTTCTTACTTAAGG 540
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Qy 541 GGGACATTTTACCAAGAGGATATGATCAACCATTAACATCAAACTTGAAGCTTAC 600
Db 541 GGGACATTTTACCAAGAGGATATGATCAACCATTAACATCAAACTTGAAGCTTAC 600
Qy 601 AAATTAAGG 609
Db 601 AAATTAAGG 609

RESULT 2
US-10-021-323-225/c
; Sequence 225, Application US/10021323
; Publication No. US20040123340A1
; GENERAL INFORMATION:
; APPLICANT: Deikman, Jill
; APPLICANT: Feng, Paul C.C.
; APPLICANT: Fincher, Karen L.
; APPLICANT: Ziegler, Todd E.
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCES: 38-21(52274)B
; CURRENT APPLICATION NUMBER: US/10/021,323
; CURRENT FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: US 60/255, 619
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 17880
; SEQ ID NO 225
; LENGTH: 610
; TYPE: DNA
; ORGANISM: Gossypium hirsutum
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(610)
; OTHER INFORMATION: unsure at all n locations
; OTHER INFORMATION: Clone ID: LIB3825-002-Q1-X6-B5
US-10-021-323-225

Query Match 76.1%; Score 463.2; DB 17; Length 610;
Best Local Similarity 94.5%; Pred. No. 1.1e-136;
Matches 500; Conservative 0; Mismatches 26; Indels 3; Gaps 2;
Qy 82 TTTTGAATTTCTGAAATCAACCATGCGCTGGAATTCGTTGCTGTAATTCGTAATCAACCAATCATGC 141

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Db 604 TTTTGAATTTCTGAAATCAACCATGCGCTGGAATTCGTTGCTGTAATTCGTAATCAACCAATCATGC 545
Qy 142 TCTGCACTCTTTTCCACTATTTTCACTCATACCACTGCTTCCAGCAGTATTCAA 201
Db 544 TTTTGAATTTCTGAAATCAACCATGCGCTGGAATTCGTTGCTGTAATTCGTAATCAACCAATCATGC 485
Qy 202 GCTCTCATCTCCCTCCCAACCCATCCCAATTCAGTCAAACTTTTGAAGGCTTTCGCAA 261
Db 484 GCTCTCATCTCCCTCCCAACCCATCCCAATTCAGTCAAACTTTTGAAGGCTTTCGCAA 425
Qy 262 GCTCACTCTCTTCTTCTTCAACCGCGCTGATGACCAATTCCTCTCTCTCTTCTG 321
Db 424 GCTCACTCTCTTCTTCTTCAACCGCGCTGATGACCAATTCCTCTCTCTCTTCTG 365
Qy 322 CACCACTCATGTCAGTGGTTCGAGATGGATTCATAAAAGAACCAAGATTCATCAAGT 381
Db 364 CACCACTCATGTCAGTGGTTCGAGATGGATTCATAAAAGAACCAAGATTCATCAAGT 305
Qy 382 TCAACATGTTTTCCTTCCCACTAAAGGCTCCAAATTCCTCAAGGCTGAATTCAGACAGACCGCA 441
Db 304 TCAACATGTTTTCCTTCCCACTAAAGGCTCCAAATTCCTCAAGGCTGAATTCAGACAGACCGCA 245
Qy 442 TTCT-CTGGAGCAACCAATTCAGCTCCCTCCAGCTAAAGGCTGAATTCAGACAGACCGCA 500
Db 244 TTCTGGTGNAGCAACCAATTCAGCTCCCTCCAGCTAAAGGCTGAATTCAGACAGACCGCA 187
Qy 501 AGCTTCTCGAATACGCTTTCGAGTTCGAGTTCCTTACTTAAGGGGAGCATTTTACCAACCAAG 560
Db 186 AGCTTCTCGAATACGCTTTCGAGTTCGAGTTCCTTACTTAAGGGGAGCATTTTACCAACCAAG 127
Qy 561 AGGATATGATCAACCAATTAACATCAAACTTGAAGCTTACAAATTAAGG 609
Db 126 AGGATATGATCAACCAATTAACATCAAACTTGAAGCTTACAAATTAAGG 78

RESULT 3
US-10-424-599-6121/c
; Sequence 6121, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yinhua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Uses Thereof for Plant Improvement
; FILE REFERENCES: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 6121
; LENGTH: 876
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(876)
; OTHER INFORMATION: unsure at all n locations
; OTHER INFORMATION: Clone ID: PAT_MRT3847_105537C.1
US-10-424-599-6121

Query Match 30.9%; Score 188.2; DB 13; Length 876;
Best Local Similarity 63.2%; Pred. No. 7e-49;
Matches 324; Conservative 0; Mismatches 183; Indels 6; Gaps 2;
Qy 50 AATAACTCAAGACGGGAATGATACATCATGTTTGAATTTCTTGAATTCACCAATCAACCAATGC 109
Db 640 AACAATCATGAAGTTGTAAGAGCATCATGCCCTTAAACTCTGAAATCAAGCTTGC 581
Qy 110 GTCGAATTTGTCGTAATACCAATCATGCTCTGAGTCTTTTCA---CTATTTC 166

```

Db 580 ATCAAGTTAGTGTATAGAGCAAAATCATGATGACAAATCTTTGGCCACACCTTTTCATC 521  
 QY 167 ACCTCAGATCCAGTCTTCCAGCAGCTATTTCAAGCTCTCTCAGATCCCTCCCAACCCATC 226  
 Db 520 ATCCCATGTCAGGCTTTTCAACACACACTCAAGCTCTTGGCTTGTGATGAACCCATC 461  
 QY 227 CCATTCAGTCAACACCTTTAAAGCCCTTCCAGGTCACCTGTCTCTCTCTCTCTCTCTCT 286  
 Db 460 ATCATCCAAATCAAAACCTTGAAGCCTTGAAGGCTTGAAGGTCCTCTCTCTCTCTCTCTCT 401  
 QY 287 GCGGTGATGACCAATTCCT 346  
 Db 400 ATCAATATCATCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCC 341  
 QY 347 GATGATTCATAAAGAAACAAAGATTCATCAAGTTCAAGTTCAAAGTTCCTCTCTCTCTCTCT 406  
 Db 340 CCTAGATTCATAAAGAAACAAAGTCTCTGAGTCGAGGCTTTCTTTTCCCAACAAAGA 281  
 QY 407 CTCAATTCCTCAAGGCTGAATTTGACAGACCCGATTTCTCTGAGCAACCAATTCAGCTC 466  
 Db 280 CTCAATTCCTCAATGCTATAACCGA---ACCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCT 224  
 QY 467 CTCCAGACTACGAGCCATCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 526  
 Db 223 CTCAAGGCTCAAAAACCCATCCGCTTCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 164  
 QY 527 GGTCTTACTAGGGGGGACATTTTACCACCAA 559  
 Db 163 ACTCGGTGTTAGTGGACACATTTTGTACAAA 131

RESULT 4  
 US-10-424-599-41291/c  
 ; Sequence 41291, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gorlach, Jorn  
 ; APPLICANT: An, Yong-Qiang  
 ; APPLICANT: Hamilton, Carol M.  
 ; APPLICANT: Price, Jennifer L.  
 ; APPLICANT: Raines, Tracy M.  
 ; APPLICANT: Yu, Yang  
 ; APPLICANT: Rameaka, Joshua G.  
 ; APPLICANT: Page, Amy  
 ; APPLICANT: Matthew, Abraham V.  
 ; APPLICANT: Ledford, Brooke L.  
 ; APPLICANT: Moessner, Jeffrey P.  
 ; APPLICANT: Haas, William David  
 ; APPLICANT: Garcia, Carlos A.  
 ; APPLICANT: Kricker, Maja  
 ; APPLICANT: Slader, Ted  
 ; APPLICANT: Allen, Keith R.  
 ; APPLICANT: Hoffman, Neil  
 ; APPLICANT: Hurban, Patrick  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53223)B  
 ; CURRENT APPLICATION NUMBER: US/10/424,599  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 285684  
 ; SEQ ID NO 41291  
 ; LENGTH: 856  
 ; TYPE: DNA  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_137288C.1  
 US-10-424-599-41291

Query Match 24.1%; Score 146.6; DB 13; Length 856;  
 Best Local Similarity 57.9%; Pred. No. 1.3e-35;  
 Matches 303; Conservative 0; Mismatches 184; Indels 36; Gaps 1;  
 QY 54 ACTCAAGCGGAATGTAATCATCTTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTTT 113  
 Db 543 ATTCAAGCTTTGGTGAGCAATCATCTGTTTGAATTTTGAATTTTGAATTTTGAATTTTGAAT 484  
 QY 114 GAATTTGTTGTTGTAATTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTT 173  
 Db 483 AATTTGTTGTTGTAATTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTT 424  
 QY 174 ATACCCAGTCTTCCAGCAGATTTCAAGTCTCTTCAATCCCTCCCAACCCATCCCTCTTC 233  
 Db 423 AAGCCAGGCTCTTCAAGCAGACTCAAGGCTCTTGGCTTGGATTTGAATTTGAATTTGAATTC 364  
 QY 234 AAGTCAAAACCTTTAAAGGCTTTGCAAGGCTCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 293  
 Db 363 AAGTCAAAACCTTTAAAGGCTTTGCGCAGGTGCT----- 329

QY 294 ATGACCAATTCCTCTCTCTCTCTCTCTCTCTCAACCATGCGCAGTGGGTTCAGATGGAT 353  
 Db 328 -----CTCCAATCTCACTTCT 280  
 QY 354 TCATAAAGAAACAAAGATTCATCCAAATTTCAAAATGTTTCCCACTAAAGGCTCCCAAT 413  
 Db 279 TTGTAAGAAACAAAGATTCATGAAACCAAGACTTTCTTTTCCCAAGTGAATTTCCAAAC 220  
 QY 414 TCTTCAAGGCTGAATTTGACAGACCCGATTTCTCTGAGCAACCAATTCAGTCTCTCCAGA 473  
 Db 219 TCTTCTATGCTATATTGGGAATTTGCCGCTCATCTCAAGCAATCGATTCAAGTCTCTCAAG 160  
 QY 474 CTAAGCAAGCCATCTCCCAATTTCTGAGCTTCTCGAATACGGTTGCAAGTCTGGTCTTA 533  
 Db 159 CTCACCAATCTGCTGCCATTTCACTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 100  
 QY 534 CTAAGGGGGGACATTTTACCCCAAGAGGATATGATCACCAT 576  
 Db 99 GTTAGGAGACATATTGCAAAATAACATCAATTTTAAAGGCT 57

RESULT 5  
 US-09-770-791-166  
 ; Sequence 166, Application US/09770791  
 ; Patent No. US20020062014A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gorlach, Jorn  
 ; APPLICANT: An, Yong-Qiang  
 ; APPLICANT: Hamilton, Carol M.  
 ; APPLICANT: Price, Jennifer L.  
 ; APPLICANT: Raines, Tracy M.  
 ; APPLICANT: Yu, Yang  
 ; APPLICANT: Rameaka, Joshua G.  
 ; APPLICANT: Page, Amy  
 ; APPLICANT: Matthew, Abraham V.  
 ; APPLICANT: Ledford, Brooke L.  
 ; APPLICANT: Moessner, Jeffrey P.  
 ; APPLICANT: Haas, William David  
 ; APPLICANT: Garcia, Carlos A.  
 ; APPLICANT: Kricker, Maja  
 ; APPLICANT: Slader, Ted  
 ; APPLICANT: Allen, Keith R.  
 ; APPLICANT: Hoffman, Neil  
 ; APPLICANT: Hurban, Patrick  
 ; TITLE OF INVENTION: Expressed Sequences of Arabidopsis  
 ; TITLE OF INVENTION: thaliana  
 ; FILE REFERENCE: 2029 (PARA-018PRV)  
 ; CURRENT APPLICATION NUMBER: US/09/770,791  
 ; CURRENT FILING DATE: 2001-01-26  
 ; PRIOR APPLICATION NUMBER: 60/178,480  
 ; PRIOR FILING DATE: 2000-01-27  
 ; NUMBER OF SEQ ID NOS: 999  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 166  
 ; LENGTH: 381  
 ; TYPE: DNA  
 ; ORGANISM: Arabidopsis thaliana  
 US-09-770-791-166

Query Match 13.3%; Score 81.2; DB 9; Length 381;  
 Best Local Similarity 61.2%; Pred. No. 5.4e-15;  
 Matches 131; Conservative 0; Mismatches 83; Indels 0; Gaps 0;  
 QY 68 ATGTAACATCATGTTTGTGAATTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTT 127  
 Db 167 ATGTAAGATCATGTTTGTGAATTTTGAATTTTGAATTTTGAATTTTGAATTTTGAATTC 226  
 QY 128 ATACCAATCATGCTCTGAGTCTTTTCCACTNTTTTCACTTCTTCACTTCACTTCACTTCTTC 187  
 Db 227 AACTCGAATCATTTCTCCCAATCCCAAGGCTTTGCTCTCTCTCTCTCTCTCTCTCTCTCTCT 286





RESULT 14  
US-10-424-599-23473/c  
; Sequence 23473, Application US/10424599

Publication No. US20040031072A1  
GENERAL INFORMATION:  
APPLICANT: La Rosa Thomas J  
APPLICANT: Kovalic David K  
APPLICANT: Zhou Yihua  
APPLICANT: Cao Yongwei  
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
FILE REFERENCE: 38-21(53223)B  
CURRENT APPLICATION NUMBER: US/10/424,599  
CURRENT FILING DATE: 2003-04-28  
NUMBER OF SEQ ID NOS: 285684  
SEQ ID NO 23473  
LENGTH: 1924  
TYPE: DNA  
ORGANISM: Glycine max  
FEATURE:  
OTHER INFORMATION: Clone ID: PAT\_MRT3847\_121198C.1  
US-10-424-599-23473

Query Match 9.8%; Score 59.8; DB 13; Length 1924;  
Best Local Similarity 52.6%; Pred. No. 1e-07;  
Matches 130; Conservative 0; Mismatches 117; Indels 0; Gaps 0;  
QY 74 CATCATGTTTGTGAATCTTGAAATCAACCATGCGTCTGAAATTTGGTGTGTAATACCA 133  
DB 1176 CATCATTTGCTTGAACTCTTGAAATCGAATGCGCTCTCCATCAACATCAACCTTGGGA 1117  
QY 134 AATCATGCTCTGAGTCTTTTCCACTATTTCACCTCCTACATACCCAGTCTTCCCGACAC 193  
DB 1116 TATCATGTTCTTCAGTCTTGGAGGTTCTGCCCTGCTTCAAGCGGAGGAGACAGGAC 1057  
QY 194 GTATTCAAGCTCTTCATATCCCAACCCATCCCAATTCAGTCAAAACACATTTAAAGC 253  
DB 1056 GGTCTCACTCGTCAAGCGGTGATGAAGCGTCTGGGCTTCTGGTCAAGACGTTGAAGGC 997  
QY 254 CTTCGCAAGTCACTGCTTCTTCTTCCACCGCGCGTGAATGACCAATTCCTCTCTC 313  
DB 996 CTCCCTCATGCTC 937  
QY 314 CTCTTCG 320  
DB 936 CTCTTCG 930

RESULT 15  
US-10-424-599-79630/c  
Sequence 79630, Application US/10424599  
Publication No. US20040031072A1  
GENERAL INFORMATION:  
APPLICANT: La Rosa Thomas J  
APPLICANT: Kovalic David K  
APPLICANT: Zhou Yihua  
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
FILE REFERENCE: 38-21(53223)B  
CURRENT APPLICATION NUMBER: US/10/424,599  
CURRENT FILING DATE: 2003-04-28  
NUMBER OF SEQ ID NOS: 285684  
SEQ ID NO 79630  
LENGTH: 786  
TYPE: DNA  
ORGANISM: Glycine max  
FEATURE:  
OTHER INFORMATION: Clone ID: PAT\_MRT3847\_42921C.1  
US-10-424-599-79630

Query Match 9.6%; Score 58.4; DB 13; Length 786;  
Best Local Similarity 55.4%; Pred. No. 1.6e-07;  
Matches 113; Conservative 0; Mismatches 91; Indels 0; Gaps 0;  
QY 74 CATCATGTTTGTGAATCTTGAAATCAACCATGCGCTCTGAAATTTGGTGTGTAATACCA 133

DB 717 CATCATTTGCTGAACTCTTGTGAATTAACCATGCGCATCTCCATCAACGTCGACTTTCAT 658  
QY 134 AATCATGCTCTGAGTCTTTTCCACTATTTCACCTCACATACCCAGTCTTCCCGACAC 193  
DB 657 GATCATCTTCTTGCACTCTGTAAGGTCCTCTGTTTGGGCGGAGGAGGCGGACAC 598  
QY 194 GTATTCAAGCTCTTCATATCCCAACCCATCCCAATTCAGTCAAAACACATTTAAAGC 253  
DB 597 TGTCCCTAGTCTCTCGACGGTGAATGAACCGTCTGGGTTCTGGTCAAAAGACGTTAAAGGC 538  
QY 254 CTTCGCAAGTCACTGCTTCTCTTC 277  
DB 537 CTCCCTCATGTCCTCTCTCTCATC 514

Search completed: August 4, 2004, 17:00:19  
Job time : 248 secs

GenCore version 5.1.6  
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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: July 29, 2004, 09:23:35 ; Search time 17.5 Seconds

(without alignments)

3533.168 Million cell updates/sec

Title: US-10-021-323-13

Perfect score: 1100

Sequence: 1 ggtaatgaatacaactttt.....tgaagctntacaattaagg 609

Scoring table: BLOSUM62

Xgapop 10.0, Xgapext 0.5

Ygapop 10.0, Ygapext 0.5

Fgapop 6.0, Fgapext 7.0

Delop 6.0, Delext 7.0

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 778828

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

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-Q=/cgn2\_1/USPRO\_spool\_p/US10021323/runat\_29072004\_101747\_1601/app\_query.fasta\_1.775  
-DB=Issued Patents AA -QW=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi  
-LAST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTPWT=ptc -NORM=ext -HEAPSIZ=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US10021323 @CGN 1 1 27 @runat\_29072004\_101747\_1601 -NCPU=6 -ICPU=3  
-NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG  
-DEV\_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued Patents AA:

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2: /cgn2\_6/ptodata/2/iaa/5B COMB.pcp:  
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4: /cgn2\_6/ptodata/2/iaa/6B COMB.pcp:  
5: /cgn2\_6/ptodata/2/iaa/PCTUS COMB.pcp:  
6: /cgn2\_6/ptodata/2/iaa/backfiles.pcp:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	159	15.0	149	3	US-08-963-409-3
C 2	155	14.6	150	3	US-09-239-909-2
C 3	152.5	14.4	160	2	US-08-602-941-1
C 4	152.5	14.4	160	3	US-08-961-264-1
C 5	152.5	14.4	160	4	US-09-442-099A-1
C 6	152.5	14.4	160	4	US-09-612-342-1
C 7	152.5	14.4	160	4	US-09-612-421A-1
C 8	152.5	14.4	160	4	US-09-724-401-1
C 9	147	13.9	150	3	US-09-239-909-4
C 10	147	13.9	642	2	US-08-818-253-2
C 11	147	13.9	642	3	US-08-818-252-2
C 12	147	13.9	652	2	US-08-818-253-4

C 13	147	13.9	652	3	US-08-818-252-4	Sequence 4, Appli
C 14	145.5	13.7	456	1	US-08-464-164-2	Sequence 2, Appli
C 15	145.5	13.7	456	1	US-08-338-057-2	Sequence 2, Appli
C 16	145.5	13.7	456	2	US-08-668-416-2	Sequence 2, Appli
C 17	145	13.7	149	1	US-08-100-874-2	Sequence 2, Appli
C 18	144.5	13.6	152	3	US-08-963-409-5	Sequence 5, Appli
C 19	144	13.6	642	2	US-08-818-252-6	Sequence 6, Appli
C 20	144	13.6	642	3	US-08-818-252-6	Sequence 6, Appli
C 21	144	13.6	656	3	US-08-818-253-8	Sequence 8, Appli
C 22	144	13.6	656	3	US-08-818-253-8	Sequence 8, Appli
C 23	143	13.5	408	1	US-07-951-715A-21	Sequence 21, Appli
C 24	143	13.5	408	3	US-08-459-48A-21	Sequence 21, Appli
C 25	143	13.5	408	3	US-08-459-48A-21	Sequence 21, Appli
C 26	143	13.5	408	3	US-08-459-48A-21	Sequence 21, Appli
C 27	143	13.5	408	3	US-08-459-48A-21	Sequence 21, Appli
C 28	143	13.5	408	4	US-09-547-422-21	Sequence 21, Appli
C 29	143	13.5	464	1	US-07-951-715A-22	Sequence 22, Appli
C 30	143	13.5	464	2	US-08-459-48A-22	Sequence 22, Appli
C 31	143	13.5	464	3	US-08-459-48A-22	Sequence 22, Appli
C 32	143	13.5	464	3	US-08-459-48A-22	Sequence 22, Appli
C 33	143	13.5	464	3	US-08-459-48A-22	Sequence 22, Appli
C 34	143	13.5	464	3	US-08-459-48A-22	Sequence 22, Appli
C 35	141	13.3	149	3	US-08-963-409-4	Sequence 4, Appli
C 36	141	13.3	149	3	US-08-641-873-20	Sequence 20, Appli
C 37	133	12.5	145	3	US-08-720-625-5	Sequence 5, Appli
C 38	132	12.4	142	1	US-07-951-715A-24	Sequence 24, Appli
C 39	132	12.4	142	2	US-08-459-48A-24	Sequence 24, Appli
C 40	132	12.4	142	3	US-08-459-48A-24	Sequence 24, Appli
C 41	132	12.4	142	3	US-08-459-48A-24	Sequence 24, Appli
C 42	132	12.4	142	3	US-08-459-48A-24	Sequence 24, Appli
C 43	132	12.4	142	4	US-09-547-422-24	Sequence 24, Appli
C 44	127.5	12.0	146	3	US-08-963-409-1	Sequence 1, Appli
C 45	121.5	11.5	179	3	US-08-764-563-4	Sequence 4, Appli

#### ALIGNMENTS

##### RESULT 1

US-08-963-409-3

; Sequence 3, Application US/08963409

; Patent No. 6046315

; GENERAL INFORMATION:

; APPLICANT: Hillman, Jennifer L.

; APPLICANT: Shah, Purvi

; APPLICANT: Corley, Neil C.

; TITLE OF INVENTION: DISEASE ASSOCIATED CALMODULIN PROTEIN

; NUMBER OF SEQUENCES: 5

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Incyte Pharmaceuticals, Inc.

; STREET: 3174 Porter Dr.

; CITY: Palo Alto

; STATE: CA

; COUNTRY: USA

; ZIP: 94304

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FASTSEQ for Windows Version 2.0

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/963,409

; FILING DATE: Filed Herewith

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: Billings, Lucy J.

; REGISTRATION NUMBER: 36,749

; REFERENCE/DOCKET NUMBER: PF-0418 US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 650-855-0555

; TELEFAX: 650-845-4166

; INFORMATION FOR SEQ ID NO: 3:



## SEQUENCE CHARACTERISTICS:

LENGTH: 149 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: GenBank

CLONE: 385234

US-08-963-409-3

## Alignment Scores:

Pred. No.: 1.17e-09 Length: 149

Score: 159.00 Matches: 44

Percent Similarity: 50.00% Conservative: 39

Best Local Similarity: 26.51% Mismatches: 55

Query Match: 14.99% Indels: 28

DB: 3 Gaps: 6

US-10-021-323-13 (1-609) x US-08-963-409-3 (1-149)

QY 550 AAAATGTCCTCCCTTAGTAAGACCGACTTGCACCGGTATTCGAGAGCTCGACAGAT 491

Db 4 LysLeuThrGluGluGlnLeuSerGluPheLeuPheSerLeuPheAspLysAsp 23

QY 490 GGAGATGCTTGGTGTAGTCTGAGGAGCTGGAATGGTCTCCAGAGATCGGG----- 437

Db 24 GlyAspGlyThrIleThrLysGluLeuGlyThrValMetArgSerLeuGlyGlnAsn 43

QY 436 -----TCGTCCAATTGACCTTGAGAAATGGAGCCCTTAGTGGGAAACCA 389

Db 44 ProThrGluAlaGluLeuGlnAspMetIleAsnGluIleAsp---ThrAspGlyAsnGly 62

QY 388 TGTTTGAACCTTGGATGAATCTTGTCTTTATGAATCCATTCGACCCACTGGCCACAT 329

Db 63 ThrIleAspPheProGluPheLeuThrLeu-----MetAlaArgLysLeuLys--- 78

QY 328 GGTGTGACGAG 269

Db 79 -----AspThrAspThrGluGluLeuLeu----- 87

QY 268 AGTGACCTTGGAGAGCTTTAAAGCTTTGACTTGAATGGGATGGGTGGGGGATGT 209

Db 88 -----GluAlaPheArgValPheAspArgAspGlyAspGlyTyrIleSerAla 103

QY 208 GAGGAGCTTGAATACGTCTCTGGAAGACTGGGTATGTGAGGTGGAATAATAGTGGAAAGAC 149

Db 104 AspGluLeuArgHisValMetThrAsnLeuGly-----GluLysLeuThrAsnGluGlu 121

QY 148 TGCAGGACATGTTTGTATTACACACCAATTCAGACCGCATGGTGTGATTTTCAAGAA 89

Db 122 ValAspGluMetIleArgGluAlaAspIleAspGlyAspGlyGlnIleAsnTyrGluGlu 141

QY 88 TCAAAACATGATGTTA 71

Db 142 PheValLysMetMetIle 147

## RESULT 2

US-09-239-909-2

Sequence 1, Application US/09239909

Patent No. 6284952

GENERAL INFORMATION:

APPLICANT: Kumbo Petrochemical Co. Ltd.

TITLE OF INVENTION: Transgenic Plants with Divergent SCAM4 or SCAM5 Gene to Achieve

FILE REFERENCE: P99-2-6

CURRENT APPLICATION NUMBER: US/09/239,909

CURRENT FILING DATE: 1999-01-29

EARLIER APPLICATION NUMBER: RP 99300136.1

EARLIER FILING DATE: 1999-01-08

NUMBER OF SEQ ID NOS: 4

SOFTWARE: KOPATIN 1.0

SEQ ID NO 2

LENGTH: 150

TYPE: FRT

ORGANISM: G. max calmodulin4 (SCAM4)

US-09-239-909-2

## Alignment Scores:

Pred. No.: 3.34e-09 Length: 150

Score: 155.00 Matches: 47

Percent Similarity: 47.20% Conservative: 29

Best Local Similarity: 29.19% Mismatches: 57

Query Match: 14.61% Indels: 28

DB: 3 Gaps: 5

US-10-021-323-13 (1-609) x US-09-239-909-2 (1-150)

QY 526 GACTTGCACCGGTATTCGAGAGCTCGACAGATGAGATGGCTTCGTAGTCTGGAG 467

Db 12 AspPheLysGluAlaPheGlyLeuPheAspLysAspGlyAspGlyCysIleThrValGlu 31

QY 466 GAGCTGAATTTGGTCTCCAGAGATCGGTCTGTCCCAATTCAGCTTCAGAAATGGAG 407

Db 32 GluLeuAlaThrValIleArgSerLeuAspGln---AsnProThrGluGluGluLeuGln 50

QY 406 CCTTTAGTG-----GGAAACCATGTTTGAACCTTGAATGGAATCTTGT 365

Db 51 AspMetIleSerGluValAspAlaAspGlyAsnGlyThrIleGluPheAspGluPheLeu 70

QY 364 TTCCTTTATGATCCATCTCGAACCCACTGGCACATGGTGGTGCACGAGAGAGAGAG 305

Db 71 -----SerLeuMetAlaLysLysValLysAspThrAspAlaGluGluGlu--- 85

QY 304 GAAATTTGCTTCACGGCGCGGTGCAAGAAGACAGTGCACCTTCGCAAGGCTTTTAA 245

Db 86 -----LeuLysGluAlaPheLys 91

QY 244 GTGTTTGACTTGAATGGGATGGGTGGGGGATGTGAGAGCTTGAATACGTCTGGGA 185

Db 92 ValPheAspLysAspGlnAsnGlyTyrIleSerAlaSerGluLeuArgHisValMetIle 111

QY 184 AGACTGGGTATGTAGGTGCAAAATAGTGCMAAAGACTGCAGGAGCATGATTTGGTATTAC 125

Db 112 AsnLeuGly-----GluLysLeuThrAspGluGluValGluGlnMetIleLysGluAla 129

QY 124 GACACCAATTCAGACGGCATGTTGATTTTCAAGAAATTCAAAAACATGATGTATCATCC 65

Db 130 AspLeuAspGlyAspGlyGlnValAsnTyrGluGluPheValLysMetMetMetThrVal 149

QY 64 CGT 62

Db 150 Arg 150

## RESULT 3

US-08-602-941-1

Sequence 1, Application US/08602941

Patent No. 5837680

GENERAL INFORMATION:

APPLICANT: Moses, Marsha A.

APPLICANT: Langer, Robert S.

APPLICANT: Wiederschain, Dimitri G.

APPLICANT: Wu, Immin

APPLICANT: Sytkowski, Arthur

TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS

TITLE OF INVENTION: COMPRISING TROPONIN SUBUNITS, FRAGMENTS AND ANALOGS

NUMBER OF SEQUENCES: 3

CORRESPONDENCE ADDRESS:

ADDRESSEE: Pennie &amp; Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York

STATE: NY

COUNTRY: U.S.A.

ZIP: 10036-2711

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

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; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/602,941
; FILING DATE: 16-FEB-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Poissant, Brian M.
; REGISTRATION NUMBER: 28,452
; REFERENCE/DOCKET NUMBER: 8657-021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-790-9090
; TELEFAX: 212-869-8864/9741
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 160 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. 5837680e
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..160
; OTHER INFORMATION: /label= Human Past Twitch Skeletal
; OTHER INFORMATION: Muscle Troponin C
; US-08-602-941-1

Alignment Scores:
Pred. No.: 6.61e-09 Length: 160
Score: 152.50 Matches: 43
Percent Similarity: 45.86% Conservative: 29
Best Local Similarity: 27.39% Mismatches: 60
Query Match: 14.37% Indels: 25
DB: 2 Gaps: 4

US-10-021-323-13 (1-609) x US-08-602-941-1 (1-160)
QY 526 GACTTGCACGCGTATTTCGAGAGCTCGACAGAAATGAGATGGCTTCTGTAGTCTGGAG 467
Db 19 GluPhelysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValIys 38
QY 466 GAGCTGAATTGGTGTCTCCAGAGAAATCGGGTCTGTCCAAATTCAGCCTTGAAGAATTGGAG 407
Db 39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrLysGluGluLeuAsp 57
QY 406 CCCTTAGTG-----GGAAACCATGTTTGAACCTTGGATGGATTCCTTG 365
Db 58 AlaIleIleGluValAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77
QY 364 TTCTTTTATGAATCCATCTCGAACCCACTGGCACATGGTGTGACGAGAGAGGAGGAG 305
Db 78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95
QY 304 GAATTGTCATTACGCGCGGGGTGAAGAGACAGACAGTACCTTGGAGAGCTTTTAA 245
Db 96 -----LeuAlaGluCysPheArg 101
QY 244 GTGTTTGACTTGAATGGGATGGTGTGGGGGATGTGAGGAGCTTGAATACGCTCGGA 185
Db 102 IlePheAspArgAsnAlaAspGlyTyrrIleAspProGluGluLeuAlaGluIlePheArg 121
QY 184 AGACTGGGTATGTAGGTGAAATATGATGGAAGAGCTGCAGGAGCATGATTGTGATTAC 125
Db 122 AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139
QY 124 GACACCAATTACAGCGCATGGTGTGATTTTCAAGAAATCAAAACATGATG 74
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RESULT 4
US-08-961-264-1
; Sequence 1, Application US/08961264
; Patent No. 6025331

GENERAL INFORMATION:
; APPLICANT: Moses, Marsha A.
; APPLICANT: Langer, Robert S.
; APPLICANT: Wiederschain, Dimitri G.
; APPLICANT: Wu, Immin
; APPLICANT: Sytkowski, Arthur
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS
; TITLE OF INVENTION: COMPRISING TROPONIN SUBUNITS, FRAGMENTS AND ANALOGS
; TITLE OF INVENTION: THEREOF AND METHODS OF THEIR USE TO INHIBIT ANGIOGENESIS
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESS: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: U.S.A.
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/961,264
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/602,941
; FILING DATE: 16-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Poissant, Brian M.
; REGISTRATION NUMBER: 28,452
; REFERENCE/DOCKET NUMBER: 8657-021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-790-9090
; TELEFAX: 212-869-8864/9741
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 160 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. 6025331e
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..160
; OTHER INFORMATION: /label= Human Past Twitch Skeletal
; OTHER INFORMATION: Muscle Troponin C
; US-08-961-264-1

Alignment Scores:
Pred. No.: 6.61e-09 Length: 160
Score: 152.50 Matches: 43
Percent Similarity: 45.86% Conservative: 29
Best Local Similarity: 27.39% Mismatches: 60
Query Match: 14.37% Indels: 25
DB: 2 Gaps: 4

US-10-021-323-13 (1-609) x US-08-961-264-1 (1-160)
QY 526 GACTTGCACGCGTATTTCGAGAGCTCGACAGAAATGAGATGGCTTCTGTAGTCTGGAG 467
Db 19 GluPhelysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValIys 38
QY 466 GAGCTGAATTGGTGTCTCCAGAGAAATCGGGTCTGTCCAAATTCAGCCTTGAAGAATTGGAG 407
Db 39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrLysGluGluLeuAsp 57
QY 406 CCCTTAGTG-----GGAAACCATGTTTGAACCTTGGATGGATTCCTTG 365
Db 58 AlaIleIleGluValAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77
QY 364 TTCTTTTATGAATCCATCTCGAACCCACTGGCACATGGTGTGACGAGAGAGGAGGAG 305
Db 78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95
QY 304 GAATTGTCATTACGCGCGGGGTGAAGAGACAGACAGTACCTTGGAGAGCTTTTAA 245
Db 96 -----LeuAlaGluCysPheArg 101
QY 244 GTGTTTGACTTGAATGGGATGGTGTGGGGGATGTGAGGAGCTTGAATACGCTCGGA 185
Db 102 IlePheAspArgAsnAlaAspGlyTyrrIleAspProGluGluLeuAlaGluIlePheArg 121
QY 184 AGACTGGGTATGTAGGTGAAATATGATGGAAGAGCTGCAGGAGCATGATTGTGATTAC 125
Db 122 AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139
QY 124 GACACCAATTACAGCGCATGGTGTGATTTTCAAGAAATCAAAACATGATG 74
Db 140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156
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Query Match: 14.3% Indels: 25  
DB: 4 Gaps: 4

US-10-021-323-13 (1-609) x US-09-724-401-1 (1-160)

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DB 19 GluPheIysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValIys 38  
QY 466 GAGCTGAATTGGTTGCTCCAGAGAAATCGGGTCTGTCCAATTTCACGCTTGAAGAAATTGGAG 407  
DB 39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrIysGluGluLeuAsp 57  
QY 406 CCCTTAGTG-----GGAAACCATGTTTGAACCTTGGATTCGATTCCTTG 365  
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DB 78 ValMetMetValArgGlnMetLysGluAspAlaIysGlyLysSerGluGluGlu----- 95  
QY 304 GAATTGGTCTATTCACGGCGGGTGAAGAAGACACAGTACCTTTCGGAAGGCTTTTAAA 245  
DB 96 -----LeuAlaGluCysPheArg 101  
QY 244 GTGTTTGCATTTGAATGGGGATGGTGTGGGGGATGTGAGGAGCTTGAATACGTCGCTGGGA 185  
DB 102 IlePheAspArgAsnAlaAspGlyTyrIleAspProGluGluLeuAlaGluIlePheArg 121  
QY 184 AGACTGGGTATGTGAGTGTGAATAATAGTGTGAAAGACTGCGAGGAGCATGATTTGGTATTAC 125  
DB 122 AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139  
QY 124 GACACCAATTCAGACGGCATGTTGATTTCACGAATTCAAAAACATGATG 74  
DB 140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156

RESULT 9

US-09-239-909-4  
Sequence 4, Application US/09239909  
Patent No. 6284952  
GENERAL INFORMATION:  
APPLICANT: Kumbo Petrochemical Co. Ltd.  
TITLE OF INVENTION: Transgenic Plants with Divergent ScM4 or ScM5 Gene to Achieve M  
FILE REFERENCE: E99-2-6  
CURRENT APPLICATION NUMBER: US/09/239,909  
CURRENT FILING DATE: 1999-01-29  
EARLIER APPLICATION NUMBER: EP 99300136.1  
EARLIER FILING DATE: 1999-01-08  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: KOPATIN 1.0  
SEQ ID NO 4  
LENGTH: 150  
TYPE: PRT  
ORGANISM: G. max calmodulin5 (ScM5)  
US-09-239-909-4

Alignment Scores:  
Pred. No.: 2,72e-08 Length: 150  
Score: 147.00 Matches: 46  
Percent Similarity: 49.38% Conservative: 33  
Best Local Similarity: 28.75% Mismatches: 51  
Query Match: 13.85% Indels: 30  
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US-10-021-323-13 (1-609) x US-09-239-909-4 (1-150)

QY 529 ACCGACTTGCACCGCGTATTTCGAGAGCTCGACAAGAAATCGAGATGCTTGGTTAGTCTG 470  
DB 11 SerGluIleLysGluAlaPheGlyLeuPheAspIysAspGlyCysIleThrVal 30  
QY 469 GAGGACTGAATTGGTTGCTCCAGAGAAATCGGGTCTGTGTCCAATTC---AGCCTTGAGAA 413  
DB: 1 Indels: 1 Gaps: 1



Db	241	GluphelysGluAlaPheSerLeuPheAspIysAspGlyThrIleThrThrIys	266
Qy	466	GAGCTGAATTGGTGTCTCCAGAGAAATCGGCTCTGTCCAATTCAGCCTTGAA---GAATTG	410
Db	261	GlulLeuGlyThrValMetArgSerLeuGly-----GlnAsnProThrGluAlaGluLeu	278
Qy	409	GAGCCCTTAGTGGGAAAACCATGTTTGAATCTGGATGNAATTCCTTGCTCTTTTATCAATCC	350
Db	279	GlnAspMetIleAsnGluValAspAlaAspGlyAsnGlyThrIleIleThrPheProGluPhe	298
Qy	349	ATCTCGAACCACTCGGCACATGGTGTGCAGAACGAGGAGGAGGAATTCGTTCATTCAC	290
Db	299	LeuThrMetMetAlaArgLysMetLysAspThrAspSerGluGluGlu-----	314
Qy	289	GGCGGGCGTGAAGAAGACAGTGCCTCCGAAGGCTTTAAAGTGTTCAGCTTGAAAT	230
Db	315	-----IleArgGluAlaPheArgValPheAspIysAsp	325
Qy	229	GGGGATGGGTGGGGGGATGTGAGGAGCTTCAATACGTGCTGGGAAGACTGGGTATGTGA	170
Db	326	GlyAsnGlyIleSerAlaAlaGluLeuArgHisValMetThrAsnLeuGly-----	343
Qy	169	GGTGAAATAGTGAAAGACTCGCAGAGCATGATTTGGTATTTCGACACCAATTCAGAC	110
Db	344	GlulysLeuThrAspGluGluValAspGluMetIleArgGluAlaAspIleAspGlyAsp	363
Qy	109	GGCATGTTTCATTTTCAAGAATTCAAAAACATGATG	74
Db	364	GlyGlnValAsnTyrGluGluPheValGlnMetMet	375
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; Sequence 2, Application US/08464164			
; Patent No. 5614195			
; GENERAL INFORMATION:			
; APPLICANT: Tomley, Fiona M.			
; APPLICANT: Dunn, Paul P. J.			
; APPLICANT: Bumstead, Janene M.			
; APPLICANT: Vermeulen, Arno N.			
; TITLE OF INVENTION: Coccidiosis poultry vaccine			
; NUMBER OF SEQUENCES: 10			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: Akzo No. 5614195el Patent Department			
; STREET: 1300 Piccard Drive, Suite 206			
; CITY: Rockville			
; STATE: Maryland			
; COUNTRY: U.S.A.			
; ZIP: 20850			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: PatentIn Release #1.0, Version #1.25			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/464,164			
; FILING DATE: June 2, 1995			
; CLASSIFICATION: 435			
; ATTORNEY/AGENT INFORMATION:			
; NAME: Gormley, Mary E.			
; REGISTRATION NUMBER: 34,409			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: (301) 258-5200			
; INFORMATION FOR SEQ. ID NO. 2:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 456 amino acids			
; TYPE: amino acid			
; TOPOLOGY: linear			
; MOLECULE TYPE: protein			
US-08-464-164-2			
Alignment Scores: 6.37e-08 Length: 456			
Pred. No.: 145.50 Matches: 51			
Score:			





GenCore version 5.1.6  
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Title: US-10-021-323-13

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#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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C	2	401	37.8	163	12	US-10-424-599-148963	Sequence 148963,
C	3	265	25.0	269	12	US-10-425-114-50879	Sequence 50879, A
C	4	260	24.5	183	12	US-10-424-599-256423	Sequence 256423,
C	5	259.5	24.5	196	16	US-10-437-963-182194	Sequence 182194,
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C	7	245	23.1	150	12	US-10-424-599-166314	Sequence 166314,
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C	18	208.5	19.7	187	12	US-10-425-114-67716	Sequence 67716, A
C	19	205.5	19.4	139	12	US-10-424-599-228265	Sequence 228265,
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C	25	197	18.6	182	12	US-10-424-599-199507	Sequence 199507,
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C	34	179.5	16.9	140	12	US-10-424-599-146471	Sequence 146471,
C	35	175.5	16.5	146	16	US-10-437-963-126883	Sequence 126883,
C	36	174	16.4	199	12	US-10-424-599-237397	Sequence 237397,
C	37	173.5	16.4	201	16	US-10-437-963-155018	Sequence 155018,
C	38	172.5	16.3	189	12	US-10-424-599-147725	Sequence 147725,
C	39	170	16.0	200	16	US-10-437-963-173279	Sequence 173279,
C	40	165.5	15.6	151	16	US-10-437-963-144086	Sequence 144086,
C	41	164.5	15.5	109	12	US-10-424-599-228264	Sequence 228264,
C	42	162	15.3	141	12	US-10-424-599-263508	Sequence 263508,
C	43	161	15.2	141	12	US-10-424-599-238414	Sequence 238414,
C	44	161	15.2	204	16	US-10-437-963-180426	Sequence 180426,
C	45	159	15.0	151	16	US-10-437-963-173783	Sequence 173783,

#### ALIGNMENTS

##### RESULT 1

US-10-424-599-184133  
; Sequence 184133, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424, 599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 184133  
; LENGTH: 156  
; TYPE: PRT  
; ORGANISM: Glycine max  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_137288C.1.pep  
US-10-424-599-184133

Alignment Scores:

Pred. No.: 1,218-34 Length: 156  
 Score: 407.50 Matches: 90  
 Percent Similarity: 66.86% Conservative: 23  
 Best Local Similarity: 53.25% Mismatches: 43  
 Query Match: 38.41% Indels: 13  
 DB: 12 Gaps: 3

US-10-021-323-13 (1-609) x US-10-424-599-184133 (1-156)

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 QY 505 AAGCTCGACAGATGAGATGGCTGCTGTTAGTCTGAGGAGCTGAATGGTGTCTCCAG 446  
 DB 20 LysValAspValAsnGlyAspGlyLeuValSerLeuGluLeuLeuAsnArgLeuGlu 39  
 QY 445 AGAATCGGCTGTGCAATTCAGCTTGAAGATTTGAGCCCTTGTGAGGAAACCATGT 386  
 DB 40 MetThrGlyAsnSerGlnTyrSerIleGluGluLeuSerLeuValGluLysSer 59  
 QY 385 TTGAATCTGGATGAATCTTGTCTTTTATGAATCCATCTCGAACCCACTGGCACATGTT 326  
 DB 60 LeuGlyPheSerAspPheLeuPhePheTyrAsnSerIleSer----- 73  
 QY 325 GGTGACGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGT 266  
 DB 74 -----GluGlnAsnLysGlyGlu-----SerLysGlySerGluLeuGluSer 87  
 QY 265 GACCTTGGAGAGGCTTTTAAAGTGTTCAGTTGAATGGGAGTGGTGGGGGATGTGAG 206  
 DB 88 AspLeuAlaLysThrPheGluValPheAspLeuAspGlyAspGlyPheIleThrSerGln 107  
 QY 205 GAGCTTGAATAGTCTGCGGAGAGCTGGGTATGTGAGGTGAGGAGGAGGAGGAGGAGTGC 146  
 DB 108 AspLeuGluSerValLeuLysArgLeuGlyPheTyrAspGlnThrHisAlaLysAspCys 127  
 QY 145 AGGACATGATTTGGTATACACCAATTCAGAGGCGATGGTGTGATTTCAAGAATTC 86  
 DB 128 ArgThrMetIleArgPheTyrAspThrAsnPheAspGlyArgLeuAspPheGlnGluPhe 147  
 QY 85 AAAACATGATGTTACATTCCTCGTTCT 59  
 DB 148 LysThrMetMetLeuLeuThrLysAla 156

# RESULT 2

US-10-424-599-148963  
 ; Sequence 148963, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa Thomas J  
 ; APPLICANT: Kovalic David K  
 ; APPLICANT: Zhou Yihua  
 ; APPLICANT: Cao Yongwei  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53223)B  
 ; CURRENT APPLICATION NUMBER: US/10/424,599  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 285684  
 ; SEQ ID NO 148963  
 ; LENGTH: 163  
 ; TYPE: PRT  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_105537C.1.pap  
 US-10-424-599-148963

Alignment Scores:  
 Pred. No.: 6,138-34 Length: 163  
 Score: 401.00 Matches: 94  
 Percent Similarity: 65.68% Conservative: 17  
 Best Local Similarity: 55.62% Mismatches: 46

Query Match: 37.79% Indels: 12  
 DB: 12 Gaps: 4  
 US-10-021-323-13 (1-609) x US-10-424-599-148963 (1-163)

QY 547 ATGTCCTCCCTTATGAGGAGCTGCAACGCGTATTCGAGAGCTCGCAAGATGCA 488  
 DB 1 MetCysProLeuThrProSerAspLeuLeuArgIlePheGluLysValAspValAsnGly 20  
 QY 487 GATGCTTCTGTTAGTCTGAGGAGCTGCAATTCGCTCCAGAGATCCGGTCTGTGCCAA 428  
 DB 21 AspGlyPheLeuSerLeuGluLysMetLeuLeuGluLysThrGly---PheGly 39  
 QY 427 TTCAGCTTGAAGATTTGAGCCCTTATGAGGAAACCATGTTGAATTTGAGTGAATTC 368  
 DB 40 TyrSerIleGluGluLeuGluSerLeuValGlyLysLysSerLeuAspPheSerGluPhe 59  
 QY 367 TTGTTCTTTTATGAATCCATCTCGAACCCACTGGCACATGTTGTCACGAGGAGGAG 308  
 DB 60 LeuPhePheTyrGluSerArgLeuLysGlnAsnAsnGly-----Glu 74  
 QY 307 GAGGAATTTGCTCATTCACGGCGCGGT-----GAGGAAGAGACAGTGC 263  
 DB 75 LysGluLeuGlyAlaSerGlyLysAspAspSerAspGluValGluGluValGluArgAsp 94  
 QY 262 CTTCGAGAGGCTTTTAAAGTGTTCAGTTGAATGGGATGGTGGGGGATGTGAGGAG 203  
 DB 95 LeuValLysAlaPheLysValPheAspLeuAspAspGlyPheIleThrSerGlnGlu 114  
 QY 202 CTTCGATATGCTCTCGGAGAGCTGGGTATG---TCGAGGTGAAATAGTCGAAAAGACTGC 146  
 DB 115 LeuGluCysValLeuLysArgLeuGlyMetTyrAspAspGluArgCysGlyLysAspCys 134  
 QY 145 AGGACATGATTTGGTATTTACGACCAATTCAGAGCGCATGGTGTGATTTCAAGAATTC 86  
 DB 135 AlaSerMetIleCysSerTyrAspThrAsnPheAspGlyLysLeuAspPheGlnGluPhe 154  
 QY 85 AAAACATGATGTTACATTCCTCGTTCT 59  
 DB 155 LysGlyMetMetLeuLeuThrThrSer 163

# RESULT 3

US-10-425-114-50879  
 ; Sequence 50879, Application US/10425114  
 ; Publication No. US20040034888A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Liu, Jingdong  
 ; APPLICANT: Zhou, Yihua  
 ; APPLICANT: Kovalic, David K.  
 ; APPLICANT: Screen, Steven E  
 ; APPLICANT: Tabaska, Jack E  
 ; APPLICANT: Cao, Yongwei  
 ; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53313)B  
 ; CURRENT APPLICATION NUMBER: US/10/425,114  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 73128  
 ; SEQ ID NO 50879  
 ; LENGTH: 269  
 ; TYPE: PRT  
 ; ORGANISM: Zea mays  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: LIB3069-036-D11\_FLI.pap  
 US-10-425-114-50879

Alignment Scores:  
 Pred. No.: 2,828-19 Length: 269  
 Score: 265.00 Matches: 72  
 Percent Similarity: 52.51% Conservative: 22  
 Best Local Similarity: 40.22% Mismatches: 65  
 Query Match: 24.98% Indels: 20  
 DB: 12 Gaps: 6

US-10-021-323-13 (1-609) x US-10-425-114-50879 (1-269)

QY 553 GGTAAATGTC-----CCCTTAGTAAGACCGACTTGCACCGGTATTCAGAGCTC 500  
 Db 87 GlyLysMetGlnAlaArgProAspProGluLysAspLeuGlyIleValPheSerThrPhe 106  
 QY 499 GACAGAAATCGAGATGCTTGGTTAGTCTGAGAGAGCTGAATGTTGCTCCAGAGATC 440  
 Db 107 AspHisaspGlyaspGlyPheIleThrAlaValGluLeuGluGluSerLeuArgLeu 126  
 QY 439 GGGTCTGTCCAAATTCAGCTTCAAGAAATGAGCCCTTAGTGGGAAACCATTTTGAAC 380  
 Db 127 Gly---IleAlaValSerAlaAspGluAlaAlaMetValThrArgValAspAlaasn 145  
 QY 379 TTGGAT-----GAATCTGTCTTCTTATGATTCATCCATCTCGAACCCA 338  
 Db 146 SerAspGlyLeuIleAspIleHisGluPheArgGluLeuTyrAspSerIleProLysLys 165  
 QY 337 CTGGCACAT-----GGTGGTGCACGAGGAGGAGGAGGAGGATTCGTCATT 293  
 Db 166 ArgLysHisGlnHisProAlaAlaGlyGlyPheSerGlyAlaAlaArgGluValProVal 185  
 QY 292 CACGGCGCGGTGAA-----GAAGAAGACAGTGCACCTTGCAGAGCTTTTAAAGTGT 239  
 Db 186 GluGlyAspAspGluGluAlaGluGluArgAspLeuArgGluAlaPheAspValPhe 205  
 QY 238 GACTTGATGGGATGGTGGGGGATGTGAGGAGCTTGAATAGTCTGGGAGACTG 179  
 Db 206 AspGlyAsnLysAspGlyLeuIleSerAlaGluGluLeuGlyThrValLeuGlySerLeu 225  
 QY 178 GGTATGTGAGTGAATAATAGTGAATA-----GACTGCAGGAGCATGTTGG 131  
 Db 226 GlyLeuArgArgGlnGlyAsnGlyArgThrAlaValAlaAspCysArgAspMetIleArg 245  
 QY 130 TATTACAGACCAATTCAGACGGCATGGTGAATTTCAAGAAATTCAAAACATGATG 74  
 Db 246 LeuValAspSerAspGlyAspGlyMetValSerPheGluGluPheLysArgMetMet 264

RESULT 4

US-10-424-599-256423

; Sequence 256423, Application US/10424599

; Publication No. US20040031072A1

; GENERAL INFORMATION:

; APPLICANT: La Rosa, Thomas J

; APPLICANT: Kovalic, David K

; APPLICANT: Zhou, Yihua

; APPLICANT: Cao, Yongwei

; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With

; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

; FILE REFERENCE: 38-21(53223)B

; CURRENT APPLICATION NUMBER: US/10/424,599

; CURRENT FILING DATE: 2003-04-28

; NUMBER OF SEQ ID NOS: 285684

; SEQ ID NO 256423

; LENGTH: 183

; TYPE: PRT

; ORGANISM: Glycine max

; FEATURE:

; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_73574C.1.pep

US-10-424-599-256423

Alignment Scores:

Pred. No.:	8,52e-19	Length:	183
Score:	260.00	Matches:	62
Percent Similarity:	57.14%	Conservative:	30
Best Local Similarity:	38.51%	Mismatches:	53
Query Match:	24.51%	Indels:	16
DB:	12	Gaps:	4

US-10-021-323-13 (1-609) x US-10-424-599-256423 (1-183)

QY 538 CTTAGTAAGACCGACTTGCACCGCTATTCAGAGAGCTCGACAGAAATGGAGATGGCTTC 479

Db 24 LeuasnSerLeuArgLeuArgIlePheAspMetPheAspLysAsnGlyAspGlyThr 43  
 QY 478 GTTAGTCTGGAGGAGCTGAATTTGGTTGCTCCAGAGAATCGGTCTGTCCAATTCAGCCCT 419  
 Db 44 IleThrValThrGluIleSerGlnAlaLeuSerLeuLeuGly---LeuAspAlaAspVal 62  
 QY 418 GAAGATTTGGAGCCCTTAGTG-----GGAAACCATGTTTGAACCTG 377  
 Db 63 AlaGluLeuGluSerMetThrLysLeuTyrIleArgProGlyAsnGluGlyLeuThrTyr 82  
 QY 376 GATCAATTTCTTCTTTATGAATCCATCTCGAACCCACTGGCACATGTTGTCACGAA 317  
 Db 83 GluaspPheMetAlaLeuHisGluSerLeuGlyGlu-----ThrTyrPheGlyLeuVal 100  
 QY 316 GAGGAGGAGGAGAAATTTGTCATTCACGGCGCGGTGAAGAAGACAGTGCACCTTGG 257  
 Db 101 GlnAspGluGluGlu-----GlnGlnGlnAspSerAspLeuTrp 113  
 QY 256 AAGCTTTTAAAGTGTGCTTGAATCGGCGATGTTGGGGGGGATGTGAGGAGCTTGA 197  
 Db 114 GluAlaPheLysValPheAspGluAsnGlyAspGlyTyrIleSerAlaLysGluLeuGln 133  
 QY 196 TACGTGCTGGCAAGACTGGGTATGTGAGGTCAAAATAGTGAAGAAAGACTGCAGGAGCATG 137  
 Db 134 MetValLeuGlyLysLeuGlyLeuValGluGlyAsnLeuMetAspAsnValHisArgMet 153  
 QY 136 ATTTGGTATTACGACACCAATTCAGCGCATGTTGATTTTCAAGAAATTCAAAACATG 77  
 Db 154 IleGlySerValAspThrAsnHisAspGlyArgValAspPheAspGluPheLysGluMet 173  
 QY 76 ATG 74  
 Db 174 Met 174

RESULT 5

US-10-437-963-182194

; Sequence 182194, Application US/10437963

; Publication No. US20040123343A1

; GENERAL INFORMATION:

; APPLICANT: La Rosa, Thomas J.

; APPLICANT: Kovalic, David K.

; APPLICANT: Zhou, Yihua

; APPLICANT: Cao, Yongwei

; APPLICANT: Wu, Wei

; APPLICANT: Boukharov, Andrey A.

; APPLICANT: Barbazuk, Brad

; APPLICANT: Li, Ping

; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With

; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

; FILE REFERENCE: 38-21(53221)B

; CURRENT APPLICATION NUMBER: US/10/437,963

; CURRENT FILING DATE: 2003-05-14

; NUMBER OF SEQ ID NOS: 204966

; SEQ ID NO 182194

; LENGTH: 196

; TYPE: PRT

; ORGANISM: Oryza sativa

; FEATURE:

; OTHER INFORMATION: Clone ID: PAT\_MRT4530\_79404C.1.pep

US-10-437-963-182194

Alignment Scores:

Pred. No.:	9,87e-19	Length:	196
Score:	259.50	Matches:	68
Percent Similarity:	50.81%	Conservative:	26
Best Local Similarity:	36.76%	Mismatches:	54
Query Match:	24.46%	Indels:	37
DB:	16	Gaps:	6

US-10-021-323-13 (1-609) x US-10-437-963-182194 (1-196)

QY 550 AAAATGTCCCCC----- 539

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|||||
14  LysMetSerProGlyAlaGlyAlaGlySerLysLysLysGlnGlnGln 33
QY 538  CTTAGTAAGACCGACTTGCACCGCTATTCGAGAGCTCCACAGAGATGAGATGGCTTC 479
Db 34  AlaAspAlaAlaGluLeuAlaArgValPheGluLeuPheAspArgAspGlyArg 53
QY 478  GTTAGTCTGGAGGAGCTGGAATTGTTCTCCAGAGAATCGGTCTGTCGAATTCAGCCTT 419
Db 54  IleThrArgGluGluLeuGluAspSerLeuGlyLysLeuGly----IleProValProAla 72
QY 418  GAGAATTCGAGCCCTTAGTG-----GMAAAACCATGTTTGAACCTG 377
Db 73  AspGluLeuAlaAlaValIleAlaArgIleAspAlaAsnGlyAspGlyCysValAspVal 92
QY 376  GATGAATCTTGTCTTTTATGATATCCATCCGAAACCACTGGCACATGGTGGTGACGAA 317
Db 93  GluGluPheGlyGluLeuTyArgSerIle-----MetAlaGlyGlyAspSer 109
QY 316  GAGGAG-----GAGGAGGAATTGTCATTCACGGCGCGGTGAGAGAGAGAC 269
Db 110  LysAspGlyArgAlaLysGluGluGlu-----GluGluGluAsp 122
QY 268  AGTGAACCTTCGGAAGCTTTAAAGTGTTCGACTTCGATCGCGATGGGTTGGCGGATGT 209
Db 123  GlyAspMetArgGluAlaPheArgValPheAspAlaAsnGlyAspGlyTyIleThrVal 142
QY 208  GAGGAGCTTGAAATACGTCTGGGAAGACCTGGGTATGTGAGGTGAAATATGCGAAAGAGAC 149
Db 143  AspGluLeuGlyAlaValLeuAlaSerLeuGlyLeuLysGlnGlyArgThrAlaGluGlu 162
QY 148  TCCAGGAGCATGATTTGTTATACGACCAATTCAGACGCGCATGTTGATTTTCAAGAA 89
Db 163  CysArgArgMetIleGlyGlnValAspArgAspGlyArgValAspPheHisGlu 182
QY 88  TTCAAAAACATGATG 74
Db 183  PheLeuGlnMetMet 187

```

## RESULT 6

```

US-10-424-599-166315
; Sequence 166315, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 166315
; LENGTH: 212
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_121198C.1.pap
US-10-424-599-166315

```

```

Alignment Scores:
Pred. No.: 3 94e-18 Length: 212
Score: 254.00 Matches: 60
Percent Similarity: 55.15% Conservative: 31
Best Local Similarity: 36.36% Mismatches: 48
Query Match: 23.94% Indels: 23
DB: 12 Gaps: 4

```

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US-10-021-323-13 (1-609) x US-10-424-599-166315 (1-212)

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QY 550  AAAATGTCCTCCCTTAGTAAGACCGACTTGCACCGCTATTCGAGAGAGCTCGACAGAAAT 491

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|||||
59  LysArgThrThrMetAspProAsnGluLeuLysArgValPheGlnMetPheAspArgAsn 78
QY 490  GGAGATGGCTTCTGTTAGTCTGGAGAGCTCAATTTGGTTGCTCCAGAGAAATCGGCTCTGTC 431
Db 79  GlyAspGlyArgIleThrLysLysGluLeuAsnAspSerLeuGlnAsnLeuGly----Ile 97
QY 430  CAATTCAGCCTTCGAAGAATTTGGAGCCCTTAGTG-----GMAAAACCA 389
Db 98  PheIleProAspLysGluLeuGlyGlnMetIleGluArgIleAspValAsnGlyAspGly 117
QY 388  TGTTCGAATTCGATCAATTTCTTCTTTTATGATCCATCTCGAACCCACTGGCACAT 329
Db 118  CysValAspIleAspGluPheGlyGluLeuTyArgSerIleMet----- 132
QY 328  GGTGTGTCACCAAGAGGAGGAGGAGGATTTGTCATTCACGGCGCGGTGAGAGAGAGAC 269
Db 133  -----AspGluArgAspGluGluGlu----- 139
QY 268  AGTGAACCTTCGGAAGCTTTAAAGTGTTCGACTTCGATCGCGATGGGTTGGCGGATGT 209
Db 140  ---AspMetArgGluAlaPheAsnValPheAspGlnAsnAlaAspGlyPheIleThrVal 158
QY 208  GAGGAGCTTGAAATACGTCTGGGAAGACCTGGGTATGTGAGGTGAAATATGCGAAAGAGAC 149
Db 159  AspGluLeuArgThrValLeuSerSerLeuGlyLeuLysGlnGlyArgThrValGlnAsp 178
QY 148  TCCAGGAGCATGATTTGTTATACGACCAATTCAGACGCGCATGTTGATTTTCAAGAA 89
Db 179  CysLysAsnMetIleSerLysValAspValAspGlyAspGlyMetValAspPheLysGlu 198
QY 88  TTCAAAAACATGATG 74
Db 199  PheLysGlnMetMet 203

```

## RESULT 7

```

US-10-424-599-166314
; Sequence 166314, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 166314
; LENGTH: 150
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_121197C.1.pap
US-10-424-599-166314

```

```

Alignment Scores:
Pred. No.: 3 24e-17 Length: 150
Score: 245.00 Matches: 57
Percent Similarity: 56.05% Conservative: 31
Best Local Similarity: 36.31% Mismatches: 43
Query Match: 23.09% Indels: 26
DB: 12 Gaps: 4

```

```

US-10-021-323-13 (1-609) x US-10-424-599-166314 (1-150)

```

```

QY 526  GACTTCGACCGCTATTCGAGAGAGCTCCAGAGAGATGAGATGGCTTCGTTAGTCTGGAG 467
Db 5  GluLeuLysArgValPheGlnMetPheAspArgAsnGlyAspGlyArgIleThrLysLys 24
QY 466  GAGCTGAATGTTGTTGCTCCAGAGATCGGCTCTGTCCCAATTCAGCCTTCAGAAATTTGGAG 407

```

```

Db 25 GluLeuAspSerLeuGluAsnLeuGly---IlePheIleSerAspLysAspLeuSer 43
QY 406 CCCTTAGTG-----GGAACACCATGTTGAACTTGGATGAAATCTTGG 365
Db 44 GlnMetIleGlnArgIleAspValAsnGlyAspGlyCysValAspMetAspGluPheGly 63
QY 364 TTCTTTTATGAATCATCTCGAACCCACTGGCACATGGTGGTGAGCAGAGGAGGAGGAG 305
Db 64 GluLeuTyrGlnThrIleMet-----AspGluArgAspAsnGlu 76
QY 304 GAATTTGGTCATTACGCGCGCGGTGAAGAAGAAGACAGTGCCTTGGCAAGGCTTTTAAA 245
Db 77 Glu-----AspMetArgGluAlaPheAsn 84
QY 244 GTGTTTGCATTTGAATGGGATGGTGGGGGATGTGAGGAGCTTGAATACGTGTGCGGA 185
Db 85 ValPheAspGlnAsnAlaAspGlyPheIleThrValAspGluLeuArgThrValLeuSer 104
QY 184 AGACTGGGTATGTGAGGTGAATAAGTAGTGAAGAAAGACTGCAGGAGCATGATTGGTATTAC 125
Db 105 SerLeuGlyLeuLysGlnGlyArgThrValGlnAspCysLysAlaMetCileSerLysVal 124
QY 124 GACACCAATTCAGACGGCATGTTGATTTTCAAGAATTCAAAAACATCATG 74
Db 125 AspValAspGlyAspGlyMetValAspTyrLysGluPheLysGlnMetMet 141

```

RESULT 8  
US-10-437-963-123218  
; Sequence 123218, Application US/10437963  
; Publication No. US20040123343A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa, Thomas J.  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Cao, Yongwei  
; APPLICANT: Wu, Wei  
; APPLICANT: Boukharov, Andrey A.  
; APPLICANT: Barbazuk, Brad  
; APPLICANT: Li, Ping  
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated with  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53221)B  
; CURRENT APPLICATION NUMBER: US/10/437,963  
; CURRENT FILING DATE: 2003-05-14  
; NUMBER OF SEQ ID NOS: 204966  
; SEQ ID NO 123218  
; LENGTH: 172  
; TYPE: PRT  
; ORGANISM: Oryza sativa  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT4530\_26074C.1.pep  
US-10-437-963-123218

Alignment Scores:  
Pred. No.: 6,29e-17 Length: 172  
Score: 242.50 Matches: 59  
Percent Similarity: 52.76% Conservative: 27  
Best Local Similarity: 36.20% Mismatches: 68  
Query Match: 22.86% Indels: 9  
DB: 16 Gaps: 3

US-10-021-323-13 (1-609) x US-10-437-963-123218 (1-172)  
QY 538 CTTAGTAACACCGACTTGAACCGGATTCGAGAGCTCGCAAGAAATGAGATGCTTC 479  
Db 1 MetAspSerThrGluLeuArgLysValPheLysMetPheAspLysAsnGlyAspGlyArg 20  
QY 478 GTTAGTCTCGAGCGCTGAAATGTTGCTCCAGAGAAATCGGCTCTCCAAATTCAGCCCTT 419  
Db 21 IleThrLysLysGluLeuGlyGluSerPheLysAsnPheGly---IlePheIleProAsp 39  
QY 418 GAAGAAATTCGAGCCCTTAGTG-----GGAACACCATGTTTGAACCTTG 377

```

Db 40 AspGluLeuAspAlaThrMetAspLysIleAspAlaAsnGlyAspGlyCysValAspVal 59
QY 376 GATGAATCTTCTTCTTTTATGAATCCATCTCGAACCCACTGCCCATCGTGTGTGACGAA 317
Db 60 GluGluPheGlyLeuLeuTyrArgSerIleLeuGlyAspAspAlaAlaGlyArgAlaPro 79
QY 316 GAGGAGGAGGAGGAATTTGGTCAATTCACCGCGCGCGT-----GAAGAAGAAGACAGTGCAC 263
Db 80 ArgThrAlaAlaAlaIleGlyGluGlyGlyAlaProAspAspGluAspGluGly 99
QY 262 CTTCGGAAGGCTTTTAAAGTCTTTCACATTTGAATCGGGATCGGTTGGGGGAGATGTGAGGAG 203
Db 100 MetArgGluAlaPheAsnValPheAspGlnAsnGlyAspGlyPheIleThrValAspGlu 119
QY 202 CTTGAATACGTCTGGGAGAGACTGGGTATGTGAGGTGAATAATAGTGGAAAAAGACTGCAGG 143
Db 120 LeuArgSerValLeuSerSerLeuGlyLeuLysHisGlyArgThrAlaAspAspCysArg 139
QY 142 AGCATGATTTGGTATTACGACACCAATTCAGACGGCATGTTGATTTTCAAGAATTCAAA 83
Db 140 ArgMetIleSerMetValAspAlaAspGlyAspGlyArgValAspPheLysGluPheLys 159
QY 82 AACATGATG 74
Db 160 GlnMetMet 162

```

RESULT 9  
US-10-424-599-204757  
; Sequence 204757, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa, Thomas J.  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Cao, Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 204757  
; LENGTH: 150  
; TYPE: PRT  
; ORGANISM: Glycine max  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_26924C.1.pep  
US-10-424-599-204757

Alignment Scores:  
Pred. No.: 7,69e-17 Length: 150  
Score: 241.50 Matches: 59  
Percent Similarity: 54.88% Conservative: 31  
Best Local Similarity: 35.98% Mismatches: 45  
Query Match: 22.76% Indels: 29  
DB: 12 Gaps: 5

US-10-021-323-13 (1-609) x US-10-424-599-204757 (1-150)  
QY 547 ATGTCCCTTCTAGTAGTAAGACCGACTTGAACCGGATTCGAGAGCTCGCAAGAAATGGA 488  
Db 1 MetAspProMet-----GluLeuLysArgValPheGlnMetPheAspArgAsnGly 17  
QY 487 GATGGCTTCTTGTAGTCTGAGGAGCTGAAATTTGTTCTCCAGAGAAATCGGCTCTGTCCAA 428  
Db 18 AspGlyArgIleSerLeuLysGluLeuSerAspSerLeuGluAsnLeuGly---IleLeu 36  
QY 427 TTCAGCTTTCAGAAATTCGAGCCCTTAGTG-----GGAACACCATG 386  
Db 37 IleProAspLysAspLeuAlaGlnMetIleGluArgIleAspValAsnGlyAspGlyCys 56  
QY 385 TTGAACCTTGGATGAATCTTCTTCTTTTATGATCCATCTCGAACCCACTGCGACATGTT 326









Fri Aug 6 10:34:13 2004

us-10-021-323-13.rapb

Page 9

Search completed: July 29, 2004, 09:29:58  
Job time : 49.5 secs